MASSACHUSETTS PLOUGHMAN

DEVOTED TO AGRICULTURE, HORTICULTURE, THE FARM AND THE GARDEN.

NEW ENGLAND JOURNAL OF AGRICULTURE

VOL. LXIV. - NO. 34 BOSTON, MASS., SATURDAY, MAY 13 1905 WHOLE NO. 3302

MASSACHUSETTS PLOUGHMAN AND NEW ENGLAND JOURNAL OF AGRICULTURE

Official Organ of the N. E. Agricultural Society.

MASSACHUSETTS PLOUGHMAN PUB. CO.,

Publishers and Proprietors.

ISSUED WEEKLY AT

NO. 3 STATE STREET,

Boston, Mass.

TERMS:

$2.00 per annum, in advance. $2.50 if not paid in advance. Postage free. Single copies 5 cents.

All persons sending contributions to THE PLOUGHMAN for use in its columns must sign their name, not necessarily for publication, but as a guarantee of good faith, otherwise they will be consigned to the waste-basket. All matter intended for publication should be written on note size paper, with ink, and upon but one side.

Correspondence from practical farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, as the writer may wish.

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Entered as second-class mail matter.

Farm Hints for May.

With favorable conditions May will be a busy month on the farm. Fortunate those farmers who in fall and winter advanced their work as much as possible.

FROM HAY TO GRASS.

Stock, and particularly the cows, should be kept in the stable or yard until there is a fair bite of grass, enough with their other feed to keep them from shrinking in milk. If they could have the run of a moderate-sized inclosure that would answer a good purpose.

Farmers will find it for their interest to do their best by their cows at this time when butter is bringing such high prices. The period in changing from dry fodder to grass should be managed wisely. After getting a bite at the grass the relish for hay is soon lost, so in this case the grain feed should be kept well up, and as long as necessary or will be found to pay.

THE CONDITION OF THE BUTTER MARKET.

It is an unusual occurence to have prices after the spring drops, recover and return again to nearly where they were at their highest point, so different from a year ago when the markets were fairly demoralized with the abundance of storage butter and the new make. But perhaps a few weeks will change conditions materially. In the meantime the past few months has proven very satisfactory and helpful to those farmers who were having a good supply of milk.

PREPARING FOR THE HAY CROP.

There is a kind of work that should be attended to at any time of year when it is demanded. Where manure was spread on the grass-fields last fall or winter and it was left unevenly scattered about or in lumps, it should be gone over and thoroughly pulverized in some manner. If this is not attended to the results can hardly be satisfactory.

The manure needs to be in a fine condition and evenly spread to do the most good. If the ground is dry enough running a smoothing harrow or weeder over it will help to pulverize the manure.

A good bush or clod crusher, even, will answer an excellent purpose, as they will fine the manure and press it down about the roots of the grasses where it will do the most good.

The writer remembers of once seeing a man doing this kind of work with a capacious bush, on which he was comfortably seated. As he was a hearty man, the work was well done, the manure being pressed almost out of sight.

Where stock were allowed to run on any of the fields last fall, their droppings should be broken up and scattered about. All this will pay in the increase of the crop produced.

PUT THE WOOD UNDER SHELTER.

Every farmer who depends on wood for his fires should have an abundant supply, enough to furnish dry fuel the year round.

Not only should it be prepared for the stoves or furnace in season, but it should be placed under shelter early. A pile of wood that is left out of doors until fall is apt to lose much of its value. It will not burn as readily and freely and the life appears to be gone. This can be prevented by putting under cover early and then the good housewife will have no reason to complain of wet or soggy wood.

The same may be said of wood for sugar making. There should be an abundant supply for this purpose. It may be of the poorer qualities, such as would not be suitable for the house or market, but it should be well protected and dry. In boiling sap wood that will ignite quickly and produce a "good flame" is what is wanted.

THE BUSY BEES.

It is not well to begin feeding the bees for the purpose of stimulating them in brood rearing until settled, warm weather has come. Feeding them too early in the spring often does a great deal more harm than good, because the bees during a cold spell attempt to cover all the brood, with the result that they as well as the brood perish.

When breeding is heaviest bees require most water. In early spring they may be seen about the well in search of this necessary article, which goes to make up their daily bill of fare. They will fly a great distance for it, if not obtainable near by. Many bees are lost and chilled when thus carrying water for their brood.

If there is no water accessible, close to the apiary, it will pay to supply some. Take a barrel and set it a few feet from the ground, fill it with water and cover the top so no bees will be drowned. Then bore a very small hole near the bottom of the barrel and let the water drip on a board. The board should be slanted slightly to cause the water to flow slowly along. From this source the bees will be able to help themselves. The nearer the water is to the apiary the fewer bees it will require as water carriers, a very important feature at this season when the warmth and energy of every bee are needed in the hive to help build up the colony. When honey begins to come in from the field, it is no longer necessary to supply them with water, for they will get enough of it in the thin nectar which is daily brought into the hives. When running for comb honey it is hard to prevent swarming, although many of the inconveniences attending it can be very greatly reduced. I would hive the prime swarm in an empty hive on frames of foundation or empty combs, on the old stand and give it a super of sections. The other colony I would place in an entirely new location, which transfer will have the effect of reducing the parent colony so much in strength that there will be no further swarms from that one. If you cannot get around to clip all the queens wings in the spring, put perforated entrance guards over all the colonies having unclipped queens.

ODDS AND ENDS.

In the spring time there is quite a little work that needs to be done around the buildings. Rubbish is apt to accumulate and should be disposed of. That which will make kindling wood should be kept for the purpose and make a bonfire of the rest. And no one should fail to go clear around the buildings and yards with this cleaning-up process.

The buildings should not only be kept in proper repair, so as to appear neat and attractive, but the surrounding grounds should be put in presentable appearance. This will add to the good looks of the premises, and when well done will be a source of pleasure to the owner and merit the approbation of the passersby.

A little spare time now and then will accomplish much in this direction, and prove most satisfactory to those interested in their homes. The men should not hesitate to help the women in their endeavors to beautify the home. Do not begrudge the little time needed for this work.

THE CHICKENS.

From the time chickens are two days old they should be fed as much as they will eat, at first several times a day, and then less frequently but liberally each time and of such variety as to stimulate their appetite, warm mash every day, cracked corn, millet seed or wheat, and after the fourth week a little meat meal or ground beef scraps in the mash. These are better than the ground raw meat and bone which many so much praise, as they are less likely to cause bowel trouble, and they are cheaper because one pound has as much nutriment as four or five of raw meat.

When the early chickens weigh a pound and a half each there is usually a good demand for them if well fattened at a dollar a pair or more, which may be more profitable to supply than to keep them until larger, but if one cannot distinguish the cockerels and wishes to keep the early pullets for the next year's stock, wait until the best of the pullets can be selected and sell the cockerels and the culls from the pullets.

If they are to be kept longer than that age separate the sexes, as both will grow faster and fatten better if this is done. When the pullets are four or five months old it will be time enough to begin to feed them a less amount and to allow them more exercise that they may prepare for laying rather than continue to fatten, but up to that age they will not get too fat. I have had Plymouth Rock pullets laying at five months old, and others have done as well with Wyandottes.

When one has room enough for the chickens every hen that becomes broody may be allowed to hatch out a brood of chickens, as the time it requires is little if any more than that required to break them of the brooding instinct. Until they get much above the 180 eggs in a year, which not many flocks reach, there will not be many less eggs in the year from the time the pullet begins if she stops to raise a brood of chickens than if she does not, and at the end of that year she should be killed to make room for younger stock unless she has some especial claims, either for breeding or rearing chickens. Many experiments have shown that hens over two years old do not lay as many eggs as those less than that age.

If it is desirable to have hens nearly alike in size and form to secure uniformity in the chickens, it is even more important to have a good male bird of pure blood to mate with them. He should be of the same breed as the hens, but need not of necessity be a show bird, and in fact I would not care to take a bird that had taken a prize in a Poultry Show, but would prefer the brother of such a bird if nearly as good, that had not been in the heated atmosphere of a crowded hall. Such birds can often be bought for a few dollars each, and for all utility purposes are fully equal to those which are valued much higher. One good male with fifteen or twenty hens should produce as many eggs as would be needed to hatch under two or three times that number of hens, and it is better to select a few of the best hens to breed from and keep no male with the others.

MAKING A SMALL GARDEN.

Spade or plow and turn under the sods and grass, if any. Break the surface until the soil is fine and the rubbish removed. A garden seed drill is a great saver of space in planting because of its regularity in marking the rows and distributing the seed. Seeds should be planted a little deeper on light dry soil than on moist soil. For a small garden, fertilizer is very convenient and contains no weed seeds. Use plenty of it and sow broadcast before raking the soil.

Sweet peas, garden peas, onions, radishes, etc., may be planted as soon as the ground can be worked, but most seeds come up poorly if planted too early, and nothing is lost, as a rule, by waiting until the ground becomes a little warmer. Cover all small seeds over lightly and firm the surface by packing with the back of the hoe after planting.

Directions for distance between the rows, etc., are usually found on each seed package. Potatoes planted in the garden should be in rows 2½ feet apart and pieces containing one or more eyes planted eight inches apart in the row and covered with five or six inches of soil. Mark all the rows with the names of the flowers or vegetables.

In transplanting cabbages, tomatoes, etc., set the plant nearly to its first leaves. Fill the hole with water, and when it soaks away put in the plant, draw the earth around and press firmly around the roots. Transplanting should be done on a cloudy afternoon or in the evening and plants may be shaded if necessary with a piece of newspaper held in place by stones or a stick.

In cultivation the main point is to keep the soil stirred and the weeds in check. Do not be discouraged that witch grass is plenty. It will grow fast, but so will the vegetables, and a few thorough cuttings with the hoe will get the best of it. If there is a chance to water the garden, it is better to thoroughly soak the ground a few times than to frequently sprinkle the plants. Proper thinning of the plants after coming up should not be neglected.

Corn should be planted rather thickly and thinned out to three or four good stalks to the hill. Cucumbers, squashes and melons should also be planted thickly and not thinned out until well started and after the cut-worms have taken their share. Maintain a constant watch for insects, looking over the leaves and stalks for eggs and applying the usual remedies for the mature insects. Paris green is the mainstay. Apply about ¼ teaspoonful to a wooden pail of water, and keep it well stirred while using.

THE CASSAVA (SAGO PLANT).

The above cut shows the plant and roots of the Cassava, which grows luxuriantly in the South, particularly in Florida. It is fed very largely to cattle, and the claim is made for it that it will produce as good beef in that territory as corn will produce in the North. Extensive experiments have been conducted in cattle feeding with Cassava, and generally with good results. A company of Chicago capitalists have bought a large tract of land in Florida and will cultivate Cassava extensively and feed Northern cattle upon it.

Cassava will produce from 15 to 20 tons of roots per acre. They are easily cultivated and easily dug, and many farmers have fattened hogs by turning them into the Cassava fields allowing them to root for the roots.

New Method of Making Butter.

A recent bulletin of the Iowa Station describes a method of making butter which will keep longer than that made in the ordinary manner. This is an important subject, for butter which spoils quickly is always a nuisance, and the maker does not care to have his product develop disagreeable savors before it leaves his hands. Microscopic organisms are the cause, or one of the causes, of rancid butter, and these particular organisms may be present in the milk or cream. Those who manufacture butter on a large scale recognize that pasteurization is a process which is often of great value, as it destroys all germs which may be present in the milk. So far, this is all right, but having got rid of

THE OBJECTIONABLE ORGANISMS

from the milk and cream, there remains the possibility that the butter may become inoculated therewith unless the water with which it is washed is germ free. The Iowa Station took some ripened cream, divided it into two equal lots, churned one and washed the butter with ordinary well water, the other lot was churned under the same conditions, but the water with which the butter was washed was pasteurized and cooled. Three experiments made in the same way proved that the butter washed with the pasteurized keeps good very much longer than that washed with water taken direct from the well. Also, butter made from pasteurized cream kept longer than that made from cream which was untreated. The butter made from non-pasteurized cream and washed in unpasteurized water kept thirty-four or thirty-five days, while that washed with

PASTEURIZED WATER

kept sixty to seventy-five days. Where butter-making is carried on on a large scale, pasteurization of the water may be carried out economically, but in small dairies a simple boiling of the water will be sufficient, and unless the water is known to be of good quality this precaution is always advisable. Filtration is recommend as an alternative to pasteurization, as organic matter and other impurities are removed along with about ninety-five per cent. of the bacteria. The following inexpensive filter is suggested, the layers commencing at the top: Coarse gravel, two inches; charcoal, nine inches; fine coke, twelve inches; fine sand, twenty-two inches, and coarse gravel, two inches.

As neither pasteurization and sterilization of milk seem to be generally understood, it may be well, in simple terms, to explain the difference between them. The pasteurizing of milk is done for the purpose of keeping it sweet, say, for two or three days, without giving it the "boiled flavor," or destroying its nutritive qualities or palatability. This is done by heating it, usually up to 150° F. and then cooling it quickly down to 90°. It may be kept for five minutes up as high as 158° to 162° and then cooled quickly without giving it

THE BOILED FLAVOR,

but the safe point is 150°. By this degree of heat a sufficient number of the bacteria which produce acidity are destroyed or rendered inoperative. The sterilization of milk is for the purpose of entirely destroying all the bacteria, especially those which are regarded as disease-producing germs. It is practically boiled milk in a condition more suitable to the digestive apparatus of infants and invalids. To sterilize milk it is necessary to boil it in a glass vessel placed in water, and the opening closed with clean or sterilized cotton. Thus all germ life is destroyed, and if carefully bottled and sealed it will keep for months at least. Without going into minute details, this is an explanation of the differences in the two processes, and the objects to be obtained.

Stock Farming in the Moosehead Region.

A more beautiful country locality could hardly be found in New England than that of Hillside Farms, Greenville, Me., on the shores of Moosehead Lake. The locality combines forest, mountain and lake scenery. It is on the borders of New England civilization with only a little village near by and vast areas of forest in the background. From in front appear wide views across the finest lake in New England with mountain views in the distance.

The farm was originally started on the summer-home plan, but the owner, Mr. Lyman Blair, being an enterprising breeder, as well as prominently connected with other lines of business, saw the advantages of the place as a livestock farm, and the establishment now includes one of the best-known collections of pure-bred stock in the State. There are Guernsey cattle, Chesterswine, white Wyandotte poultry, Oxford Down sheep and Scotch Collie dogs.

The Guernsey herd includes stock from noted herds. The leader is the two-year-old bull, Monadnock's Rutilla's Sheet Anchor, considered one of the best specimens of the breed to be found. Among the recent additions to the farm herd is a heifer calf from an imported cow secured at the Spotswood sale in Pennsylvania through the co-operation of Secretary Caldwell of the Guernsey Cattle Club. One of the illustrations shows the Guernsey bull working in harness. It is found that the exercise is of much advantage to his health and vigor. He is very docile and reliable and can be used either for driving or for farm work. He drew all the fodder for the farm herd the past season.

The Oxford Down sheep are from the well-known Maine breeders and also from the herd at Teeswater, Ont. The herd of swine numbers about fifty, the stock coming from well-known herds in Pennsylvania and Ohio. The poultry yards include several hundred fowls, all pure-bred white Wyandottes.

The original capacity of the farm has been increased through buying what is called the Annex Farm, thus securing plenty of pasture and tillage land. At this Annex Farm is a feed mill at which all the grain for the live stock is prepared. It is bought in car lots, ground and mixed on the farm. "In this way," said Mr. Blair, "we know what is being fed, and only first quality of feed is purchased, whether for the cattle or for the swine." A portable gasoline engine is used on one farm and a steam engine on the other, and all the work possible is done with machinery.

Poultry on the Farm.

If the farmer by following the directions in a previous article gets his chickens up to a week old in good health and vigor, he should not lose many after that age, and should keep them growing every day. I said that at a week old I alternated their feed with a warm mash in which I then begin to put a tablespoonful of ground beef scraps to each quart of grain, and at next feeding give cracked corn and wheat or barley. There are some who claim they need no mash, and begin on grain from the start, but I would continue the mash at least once a day until they are large enough to sell as broilers. Remember the need of charcoal in the mash, and grit always at hand to help them grind the dry grain, also the fresh grass, or a little lettuce every day.

There is in the larger markets a demand for what are called "squab broilers," weighing twelve to eighteen ounces dressed, but is limited to a few buyers, and unless the farmer knows who will pay for them he will be safer to allow them to grow until they will weigh about two pounds alive, or later in the season to 2½ pounds. At that weight each good chicken will sell early in the season for almost as much money as it would if kept and fed three months longer, and while broilers of two pounds each sell at $1.50 a pair, it will not pay to grow them to five pounds and sell them at fifteen cents a pound. This is the time then to select out all the cockerels and all but the very best pullets from the early hatching and sell them. If of the American breeds they should be plump and fat at that weight.

Later-hatched chickens do not usually sell as well at the broiler size, and it may be better to allow them to grow until they will dress from four to six pounds each. Then cull the flock of all that are not intended for winter layers. Save few or no cockerels, none if the flock is not pure-bred, as it is better to pay the price of a half-dozen mongrels for one pure-bred male to improve the flock than to use the handsomest half-blooded one you can raise. I should also sell all pullets that did not come in form and feather very near to the markings of the breed which I had used as a male to breed from. Those that are not marked well in feathers may prove as good layers and make as good poultry, but I have a fancy for a flock of hens uniform in size and color, as I have for a well-matched pair of horses or yoke of oxen, and if I kept any that were not to my liking I would not breed from them.

The cockerels should be separated from the pullets as soon as the sex can be distinguished, as they will fatten faster and the pullets thrive better so than if they are allowed to run together. Where there is a large flock it is better to have pens enough to keep those only together that are of nearly the same size, as the larger ones often tyrannize over small ones so that they do not get a fair share of the feed. Having land enough to allow of several colony houses and yards to separate the flocks is one advantage a farmer has over the poultry keepers who have but a little lot of land in a village, and growing much of the feed for them is another.

The farmer may find it well to begin hatching chickens in March if he can find broody hens so early, but it scarcely pays to begin so early as eggs are high priced and many of them infertile until the hens can scratch in the ground. Even scratching sheds, clover feed and plenty of grit does not seem to remedy this trouble. Chickens hatched in May can easily be grown so that they will lay all winter, and often a few begin to lay at five months old. It is seldom that those hatched during the three summer months do well. They do not grow when it is too warm any better than when it is too cold, but some like to hatch a few in September and October. If well fed and kept in a warm house they make heavier chickens about Christmas, and the pullets will be laying in the spring when the other ones are broody.

If two or three hens are set at the same time and bring out but few chickens each, they may be all given to one hen, but the number should not exceed fifteen to one hen at any time and in cold weather it is better to limit her to ten. There is not much gained by taking chickens from the hen if she cares for them well, as the hen that hatches and brings up a brood of chickens has a vacation long enough to lay more eggs and a larger litter of them when she does begin than a hen that is broody and is broken up, or one that loses her chickens. Those that set in the spring will usually become broody again in the fall, and then is the time to dispose of them, as they are fat then and the space is needed for the pullets. The money received for chickens and old fowl sold in a year or used at home should exceed the value of the eggs received, even if the flock averages fifteen dozen a year, which few flocks will reach even when no chickens are raised.

M. F. AMES.

Dairy System Pays.

First select same good breed, the one best adapted to your locality, and most to your liking, and then establish a system in caring for the herd and be regular in carrying it out in every detail.

Feed at the same time each day, and the same amount. Do not think that you can feed three times one day and feed the same amount at two feeds the next and let the cows go without the third feed and get the same result. It does not matter so much how many times a day you feed as it does to feed the same number of times each day. Water as regularly as you feed and do not forget to card and brush the cows as regularly as you feed and water.

Even the cleaning of the stable and all other work about the stable should be done at the same time each day, as the cows will soon learn to know what time they are to be fed and watered and worked around, and will expect it, and become uneasy and restless if the expected operation is delayed, but will lie down peaceably and quiet after it is performed.

Cows should have their place in the stable, and be tied in the same stanchion each time. This will avoid much confusion in tieing them up, as each cow will soon learn her place and take it, and besides a tieup full of cows looks much better if the cows are arranged in order according to size, being graded from one end of the tieup to the other.

Again it is much more convenient to feed a lot of cows if they are in the same place each time so that the feeder knows just which one he is feeding even if he cannot see her. As hardly any two could require the same amount, this will be found a great convenience. Feed regularly; water regularly; groom regularly; tie up regularly, but above all, milk regularly.

A cow allowed to go any length of time beyond her usual milking time becomes uneasy and restless to the detriment of both quantity and quality of milk.

A cow also becomes used to a milker and should have the same one right along.

The idea of a man, whom I recently met, although quite original and perhaps having some good features, was, I believe, wrong in the main. He let his cows come into the stable and take their place anywhere it happened, and then at milking time he and his men began at one end and milked the cows as they came to them. This he said he did because it was difficult to get good milkers, and in this way he got a chance to milk each cow himself once in a while and find out if she was all right. He seemed to forget that the poor milker got the same chance to poorly milk all of the cows as well as himself and thus damage the whole herd.

Establish a system about your stable work and then abide by it to the nearest perfection possible and see if it does not pay.

Rutland County, Vt. E. M. PIKE.

Using Hand Separators.

One of the greatest arguments in favor of individual separators is the prevention of the spread of tuberculosis. Pasteurized separator milk is better and safer, because, if there be any milk from the cows having tuberculosis, you get the milk back pasteurized, and get it to the calves without fear of infection.

If you use a hand separator you will not spread the disease among your herd. I advocate that every creamery should heat the skimmilk up to 180°. They do not quite empty the cans at the creamery; I guarantee I could go around and collect half a pint from each can; a little milk left in the can is a good starter for the milk that is put into the cans. But if you put in the hot skimmilk at 180°, it will sterilize also the little milk that is left in the can.—J. M. Monrad, Illinois.

Soil for Potatoes.

The applying of lime to potato ground may increase the yield, but as it counteracts the acid in the soil, it has a tendency to promote the scab disease. A well-manured heavy clover sod usually makes a good potato soil. The manure should be applied in the fall or during the early winter to allow it to become assimilated with the soil, as the plant cannot feed upon it in a coarse condition.

If the soil is deficient in vegetable matter, a good plan is to plow under the sod in the fall and sow the ground with rye. Apply manure when the ground is frozen in the winter, and plow the rye under in the spring when it is about twenty inches high. If allowed to stand until it gets much higher, the weather is usually warm, and it has a tendency to sour the ground. It also prevents the moisture from rising from the subsoil too near the surface, where it can be used by the plant. It is remarkable how much finer the soil is when treated in this way.—J. W. Cox, New Wilmington, Pa.

Dairy.

Butter Markets Weakening.

The butter market has continued its declining tendency, having held up the price as long as could possibly be expected in view of the opening of the pasture season. Some dealers believe the drop will continue some time longer owing to the certainty that receipts must greatly increase for some time to come.

Dealers seem to think the time has come for a lower price on the new make of butter, although receipts have not been increased very rapidly yet. Indications point to a large production, although in some paris of the country the pasturage is backward.

When the decline in butter got well under way it went forward at a fairly rapid pace, owing to the lateness of the season. It is not the large receipts so much as the expectation of increased shipments with the opening of the pasture season that has affected the situation. The actual supplies on hand are still not large and the decline of about five cents from the recent highest is hardly warranted by anything in the immediate situation. Consumers are taking advantage of the drop and demand is better.

Best creamery sells at 25 to 25½ cents, comparing with 30 to 30½ cents three weeks ago. The supplies are well taken care of at the price, and it is hard to see any reason for a further decline just now; in fact, it would not be surprising if a little of the fall should be recovered until the shipments of the new make get well under way.

There is a good call for the cheap grades of better, a rather unusual condition, and these grades are in short supply. Buyers seem willing to pay full value for seconds and thirds as well as for firsts and extras. Creamery thirds bring within three to five cents the price of extras. Vermont and New York dairy is arriving in fairly liberal quantities and sells readily at one cent below creamery.

Print and box butters still sell at the price of corresponding grades of tub butter and are not in very good demand. For the present makers will do as well to pack in tubs for the regular trade.

Old cheese maintaines its price and the volume in reserve is very small. It looks as if the old make would all go out at close to top prices before the new is plenty enough to take its place. The country markets throughout New York State and Vermont report cheese of all kinds in light supply, the new make being late in putting in its appearance on account of the backwardness of the pasture season in Northern localities. New cheese brings about 1½ cents below old of corresponding grade.

At New York the quality of the butter has been a little irregular, but there is steady improvement; some of the creameries still show a mixture of new and old milk which is quite objectionable to most particular buyers. New York State dairy inquired for and fine selected half tubs brought 25 cents readily, in some cases a little more. The market is very lightly supplied with both imitation creamery and renovated and demand keeps up well; prices have not changed and these goods are now nearer the quotation for fancy creamery than they have been this year. Factory in light supply and steady. The market for old cheese products just about the same general features. Stocks are now in narrow compass and in few hands, who are very firm in their views, though no indications of any actual advance in quotations. Very little more old cheese to come forward and there is no question but what most everything will be wanted. Factories are now generally running and production of new cheese steadily increasing, but competition at country markets to secure new keeps prices comparatively high and only moderate proportion coming this way, though advices indicate some increase in receipts here for this week. Trading has been fair for new small so far, at generally 12½ cents for desirable grades, in instances a shade higher, very little large cheese has been made so far. New skims sell fairly when fine, but poor skims very dull and irregular.

Latest cable advices to George A. Cochrane from the principal markets of Great Britain report butter markets as again lower. The continuance of rather heavy arrivals from the Antipodes, coupled with increased offerings of Irish and home make, gives the dictating of prices largely over to buyers. Finest Danish 21½ to 22½ cents, New Zealand 20½ to 21½ cents, Australian 20 to 21 cents, Russian 20 to 21 cents, Irish 21 to 22cents. Cheese markets more steady, as the downward trend of markets has been checked for the moment. Finest American and Canadian 12½ to 12¾ cents.

Agricultural.

Hay Doing a Little Better.

Dealers seem generally agreed that the hay situation shows some sign of improvement, particularly for the better grades. The market is still overstocked and some roads have continued the embargo, refusing to accept more hay for freight until the yards have been cleared away, but shippers do not seem inclined to hurry hay upon the market at present prices, and apparently when present stock is cleared away more money will have to be paid for hay if more shipments are to be expected.

The outlook so far is not wholly favorable for the hay crop, the season being too cold, backward and dry. Every week of such weather of course increases the possibility that the next crop will be short, and any such outlook would quickly increase the value of the old stock on hand; hence holders are rather firm at present prices. In fact, the average of all Eastern and Western markets quotes a few cents higher than last week.

The following shows the highest prices as quoted for the Hay Trade Journal in the markets mentioned: Boston $17, New York $17, Jersey City $16.50, Philadelphia $15, Pittsburg $13.25, Buffalo $13.50, Nashville $14, Baltimore $15.50, Richmond $14.50, New Orleans $16.50, Chicago $13.50, Kansas City $10, Minneapolis $9.50, St. Paul $9.50, Cincinnati $12.50, St. Louis $13, Louisville $12.50.

Downward Tendency in Vegetables.

The supply in nearly all lines continues to increase week by week with the natural effect of weakening the general level of prices although some lines sell at previous values or even higher. Hothouse products of nearly all kinds, except parsley which is scarce this week, sell a little lower, the decline having averaged a few cents each week for several weeks.

New asparagus is on hand to a limited extent and is bringing good prices. Native rhubarb is plenty but sells low, being still in competition with the Southern and Californian product. The days of high priced native outdoor rhubarb seem to have passed. Formerly this crop was one of the most profitable grown in the vicinity of large Northern cities. It is still a paying crop in forcing houses, but not especially so as a field crop.

Old native onions are still very high and the prospect is that they will finish up without any special decline. Southern stock, with Bermuda and Egyptians, and gradually taking their place at this season. Old cabbage has behaved very well of late, prices having recovered considerably. New Southern cabbage is in the market and becoming plenty. Considerable outdoor cress, mostly from Pennsylvania, is on sale, also native hothouse cress. Native spinach, chiefly from around Providence, R. I., brings $1.25 per bushel. Turnips maintain the improvement noticed for the past month or two and bring prices relatively higher than potatoes.

Potatoes themselves show no improvement, although the undertone is steady, holders insisting on full quoted prices, which ought to be low enough to satisfy a reasonable buyer. No quotations above 33 cents per bushel are heard of in large quantities. New potatoes from the South bring $5 per barrel.

The Retail Markets.

After the Lent and Easter season there is usually considerable increase in the buying of seasonable table luxuries. This year dealers complain that trade has been rather lighter than usual for the time of year, but that some gain has been noted compared with the preceding weeks.

Some of the quotations may be of interest as showing how much consumers pay above the going wholesale quotations. Beef quotes at about 32 cents for rump and 25 cents for best round. Choice roasting pigs bring $2 25 each. Fish are in rather light supply, and include some of the high-priced luxuries like Penobscot salmon, at 75 cents per pound, and New Jersey mackerel at 60 cents each. Shad brings 25 cents per pound. Lobsters continue high on account of the general scarcity, selling at 22 cents. Frogs' legs are in limited demand at 40 cents per dozen.

In the fruit line, Florida melons are quite a luxury at 40 cents each but considerably cheaper than hothouse melons at $2 each. California cherries are on the market earlier than usual and fairly popular at 40 cents per pound. California oranges have been selling at an average of 35 cents per dozen, very nice ones, choice, sweet and without seeds. Strawberries are now plenty and the best bring only 30 cents per quart with poorer ones selling as low or lower than natives when in season.

Southern vegetables still hold the field, although some native truck is beginning to crowd in. New asparagus, rhubarb and spinach from nearby points bring good prices. Fancy asparagus sold this week at 75 cents per bunch but showed signs of working lower. As a sample of Southern produce, choice string beans sold at 20 cents per quart, turnips 20 cents a bunch, and beets 25 cents a bunch.

Game is nearly done. Quail and some other birds went out May 1. Moose steak may still be had at 30 cents per pound. With the departure of game, squabs and broilers come forward, squabs bringing $4 by the dozen. South Shore broilers sell at 32 cents per pound. Nearby fowls sell at 18 to 22 cents per pound, which is unusually high for the season. Turkeys sell at 25 cents to 28 cents per pound, and cold-storage chickens at 20 to 25 cents. Ducklings bring 35 cents per pound and green geese 20 to 22 cents.

Unfortunately these high prices do not by any means go to the producer, and dealers ask about the same from day to day whatever the wholesa e prices may be. If they have a chance to buy cheap they put the difference in their own pockets.

Provisions More Plenty.

The beef market holds quiet at the advance level maintained the past few weeks, with sales moderate. Some grades show a slight decline, amounting to one-half cent or thereabouts. Veals tend decidedly lower in response to the heavy receipts in markets all over the country. Western and New York markets show greater decline than Boston. Spring lambs are also more plenty with prices tending moderately lower. Western mutton, yearlings and lambs are in large supply, but prices hold fairly well.

Western Potato Men Discouraged.

Colorado potato growers are reported much discouraged over the persistent low prices of potatoes. It is said that carloads shipped from that section have caused the producers to lose as much as $60 per car. The price of 15 cents per large sack hardly pays the farmer for sorting and sacking and taking to the station, the cost of seed, labor and production being a total loss to the grower.

Some farmers are slicing the pototoes and feeding them to livestook. It is said also that some farmers in New York State are feeding potatoes freely to stock, and that some are even spreading them on their land for fertilizer, but as potatoes will not rot quickly unless first frozen, an application of this kind so late in the season would be of small use. The Colorado potato growers talk of cutting their acreage down at least twenty-five per cent. this year, but little talk of this kind has been heard in the Eastern sections, many growers appearing confident that high prices will return again this year.

Owing to the special demand by a certain class of trade for Long Island potatoes, they bring 65 to 75 cents per bushel, while similar stock in Michigan sells at 12 to 15 cents. To be sure, the Long Island potatoes cost more to grow, more fertilizer being used and higher-priced land, but without doubt the margin of profit is in favor of the Long Islanders.

Maine farmers are doing a little better than those in Michigan. Choice Green Mountain stock sells at 20 cents in New York, but prices are proportionately lower in bulk or by the bag. The shipping price in Maine is 50 cents, with the starch factories paying only 30 to 45 cents per barrel. Planting in Maine has hardly yet begun, but is in full force in the New York and Michigan districts. Indications are that plenty of potatoes will be planted this year all through the potato-growing region.

Backward Condition of Crops.

Farm and field work has progressed rapidly, but vegetation is still being held back by unfavorable weather conditions according to J. W. Smith of the New England Weather Bureau. A general warm rain is greatly needed all over the district. The recent frosts have caused but little damage to fruit buds, but some reports of trees being killed by mice during the winter have been received. Forest fires are reported from southwestern New Hampshire, with much damage resulting to forests. While the season is considered by most correspondents to be early, vegetation is about a week later than usual.

In northern portions ground preparation, fertilizing, plowing, harrowing, etc., is continuing, with some wheat and oats already in. High winds have somewhat hindered sowing. In central portions winter grain seems to be in good condition. Spring rye has been sown, oats are up in the south and the ground is being prepared for corn.

Grass and clover look well and have good color, but need rain. Pastures are fairly good, and, in many sections, there is abundant grazing for stock.

Fruit buds are coming along slowly in northern sections, while in the south cherry and plum trees are in blossom. Peach buds which had advanced rapidly under the influence of the recent warm weather, have been checked by the cool temperatures of the past fortnight. This is considered to be of benefit, inasmuch as it will lessen the probability of damage from late spring frosts, should any occur. Of small fruits, some strawberry beds are commencing to blossom and currant and berry canes are beginning to leaf out.

Potato planting is about completed in the extreme Southern portion and in progress in others; early peas are up in some places to six inches, and asparagus cutting has begun. Gardening is under way throughout the district, although in Southern sections it is advancing to a finish.

Tobacco beds are in good condition and well advanced, and setting in some places will be early. Reports indicate an increased acreage of tobacco put out this season.

Literature.

Those who enjoy out-door existence—the wild freedom of the forest and stream, will like "Silver Bells," and those who have been in search of an unconventional love story will discover one in this new novel by Lieut.-Col. Andrew C. P. Haggard, already so favorably known to the reading public. The scene is laid in the Canadian wilds, now pierced by the great railway, and Indian habits and customs are reproduced in its pages with unerring faithfulness, in the adventures of a young Englishman of titled family who, jilted in love, seeks solace for his grief by returning to a hunter's life far away from the haunts of entirely civilized man. He acquires a reputation among the Red Men as a dead shot, and is called Ready Rifle. He is eventually betrothed to a beautiful Indian maiden who bears the musical name of Silver Bells, owing to a peculiarity of her costume. It is said that she really existed, and we can well believe this, for she is an eminently natural creation, fascinating in the extreme in her graceful artlessness, yet retaining some of the savage instincts of her tribe. She is skilled in wood-craft, and this in the eyes of her lover makes amends for her lack of cultivation in other directions. Still their union is diplomatically discouraged by the good priest who baptized the girl and he dies just on the eve of their wedding, when the hero fully realizes at an Indian feast, given in honor of his coming marriage, the full significance of being wedded to a semi-savage. He goes back to England and inherits his father's estate, but is impelled to return to the encampment where he finds Silver Bells languishing for his coming. The result of this meeting it would be hardly fair to describe—suffice it to say that it reaches a conclusion that solves all difficulties. The book is dramatically entertaining throughout and has many unhackneyed situations, while its descriptions of fishing and hunting, both in Newfoundland and in the New Dominion betray the ardor and knowledge of the true sportsman. (Boston: L. C. Page & Co.)

An appropriately named volume is "An American Abelard and Heloise," by Mary Ives Todd. The heroine has the same name as that borne by the famous religious who has come down to us from the past, and she has a love story as touching as that of her prototype. The hero is a clergyman of today, who has an admiring fashionable ongregation, composed mostly of impressionable women, but he has advanced ideas that are quite beyond their reach. The abuses in church and State are dealt with by Mrs. Todd in a fearless manner in this tale, and there is a noble self renunciation in the end when Heloise sacrifices love to duty. She is an American girl of the kind that is above worldly frivolity. She is finely depicted, and so, indeed, is her clerical lover. All will not agree with them in a desire for a new religion, "based on knowledge, not ignorance—on truth, not fiction—on love, not fear," for many are satisfied with the present condition of the Christian faith, and the efforts that are being made within its folds for the betterment and advancement of the human race. The lovers are uncommon types, and their separation in the end for three years is in harmony with the reformatory views of the woman if not of those of the man in their entirety. The story is one that will appeal to many who are not anchored to any existing creed. (New York: The Grafton Press. Price, $1.50.)

Clara Driscoll has chosen Texas as the scene of a story called, "The Girl of La Gloria." Its local color is excellent and Ilaria, the heroine, is a true type of a Mexican girl. She comes of an old family whose original possessions became the property of Americans, and she herself is beloved by a New Yorker, who finds in her dark-eyed Spanish beauty a fascination that no other woman could exert. There is much historical interest in this romance and the people of all races who figure in it, possess marked individuality, while the incidents are highly picturesque and exciting, without being sensational. The love story is almost as sad as that of Romeo and Juliet. The last of the Rodriguez dies through her devotion to her lover, and in her passing the mournful tradition of her house is realised. The tale is unconventional and is constantly alluring. (New York: G. P. Putnam's Sons. Price, $1.50.)

A tale founded on fact that every lover of marine adventure will appreciate appears in "The Harvesters of the Sea," by Wilfred T. Grenfell, member of the Royal College of Surgeons. The author has had twenty years experience with the deep-sea fishermen, and he describes their perils and trials on the Dogger Banks in the North Sea and off the coast of Newfoundland and Labrador, with a keen appreciation of their heroic character in the midst of hardships and privations. His narrative is both spirited and truthful, and the toilers of the deep of the present time are shown to have as staunch a courage as that which animated the sailors of old, who never feared to face death in the effort to save human life. Though cast in the form of a story, this book furnishes a great deal of valuable information, especially concerning the philanthropic measures that have been taken to make the lot of the fishermen less cruel. Dr. Grenfell has used the results of his familiar intercourse with the fishermen with a skill that shows his heart was in his work and has thrown much needed light on the labors of the harvesters of the ocean on both sides of the Atlantic. (New York: Fleming H. Revell Company. Price, $1.00.)

Gems of Thought.

....Great truths are generally bought, not found by chance.—John Milton.

....God can do for you just what you need should be done. If it is not possible to take hold by faith, it is possible to ask for the faith to take hold.—R. J. Campbell.

...." A good book is like a happy face. It bears acquaintance. The more you study it the better you like it. It is an inspiration when present and a pleasant memory when away."

....Compassion will do more than passion. The kindly warmth of the sun made the traveler take off his cloak, while the cutting wind could not tear it off, but made him bind it closer about him; so love does more than wrath.—Spurgeon.

...." O my God, grant me" (so they are taught to pray in some monasteries in France), "grant me that today I may be of some use to some one." If God, for our good, sees fit to deny us all else, may he, as his best gift of all, grant us this,—to be of some real, of some deep use to our fellow-men before we go hence and are no more seen.—Canon Farrar.

....He wants us to have hope, but hope is impossible without faith. He wants us to love Him supremely, but one cannot love a God he distrusts. He wants our obedience, but it is folly to speak of obeying one you deny. He wants our service, but no one will serve a God he discredits. Thus faith is back of all God seeks to develop in this life.—W. H. Griffith Thomas.

....Love does not aim simply at the conscious good of the beloved object; it is not satisfied without perfect loyalty of heart; it aims at its own completeness.—Romola.

....It is nothing to a man to be greater or less than another, to be esteemed, or otherwise, by the public or private world in which he moves. Does he, or does he not, behold and love and live the unchangeable, the essential, the divine?—George MacDonald.

....The immortal soul must give itself to something that is immortal. And the only immortal things are these: "Now abideth faith, hope, love, but the greatest of these is love."—Henry Drummond.

....When you find yourself, as I daresay you sometimes do, overpowered as it were by melancholy, the best way is to go out and do something kind to somebody or other.—John Keble.

....Thank God every morning when you get up that you have something to do that day which must be done, whether you like it or not. Being forced to work and forced to do your best will breed you in temperance, self-control, diligence, strength of will, content and a hundred virtues which the idle will never know.—Charles Kingsley.

....One of the blessed, unending needs of heaven must surely be the need of giving forth into other lives the blessedness which God has poured into ours.—Lucy Larcom.

Popular Science.

—The moon is usually supposed to have solidified from the centre to the periphery, but lunar photographs have convinced two leading French astronomers that the surface hardened first This view modifies various theories.

—An outbreak of twelve cases of small-pox at Newcastle, England, last year has mystified the doctors. No ordinary source of infection could be discovered, but it has been found that on the days when eleven of the patients probably contracted the disease the wind was blowing from one or the other of two small-pox hospitals—one about a mile away, the other about two miles. It is pointed out that flies, a pest of hospitals, may be carried long distances by the wind.

—The picture telegraph of Dr. Korn of the University of Munich has been so perfected that in ten to twenty minutes a photograph 4x7 inches in size can be sent through a resistance corresponding to one thousand miles. The portrait or design to be transmitted is on a transparent film, which is wound around a glass cylinder, and upon which a lens focuses a point of light that passes through the film to a selenium cell in the cylinder. The bright and dark portions of the picture cause the ray of light to vary the resistance of the selenium cell to an electric current passing through it, and this variation produces a corresponding instantaneous brightening or darkening of the glow in a Tesla vacuum tube at the receiving end of the wire. Except a pin point aperture, this vacuum tube is covered with wax or rubber. The light ray from the aperture falls upon a sensitive film wound upon a cylinder, and as this cylinder and that of the transmitter are moved in unison, the light and shade of the original picture are reproduced in proper place on the second film, giving a new photograph accurate in minute detail.

Curious Facts.

—T. S. Terry, a business man of Downs, Kan., forwards a postal card on which are written 4400 words; or 17,600 letters, all done with a common pen and without the aid of a magnifying glass. One sentence of ten words is repeated 440 times, and each sentence is about an inch long and about one-tenth of an inch high. The lettering is scarcely legible without a glass.

—"No more strips will be shipped to England," said T. B. Auchterlonie of Liverpool, who is an official of the American tobacco trust and represents the concern in England. "The export of tobacco strips is practically at an end. The exporters cannot afford to ship the stripped leaf when the unstemmed leaf can be entered at English ports six cents lower. Leaf tobacco will be the thing for exports after this. And the North Atlantic ports will not lose the business either. The rate in that direction is ten cents a hundred higher, I will admit, but ten cents a hundred pounds on tobacco is nothing in comparison with the more rapid time which can be made by the North Atlantic ports."

—What is probably the most ancient letter in the world has just been discovered in some excavations being made in the province of Attica, and is said to have been written four centuries before Christ. It is engraved on a leaden leaf, and runs as follows: "Mnesiengos sends his greetings to those in the house and informs them that he is in good health. Please send me a blanket or some sheepskins, if possible, of the ordinary kind, without ornaments. As soon as the occasion offers I shall return them."

—The street tramways of the City of Mexico, which began only a few years ago as a few independent mule lines, now form one electric system with modern equipment. There are 120 miles of lines and the service comprises 634 cars, and 3000 horse-power is required to work the system.

—Names of foreign legislative bodies are sometimes confusing to newspaper readers. Here is a convenient list of the principal bodies corresponding to our Congress. In England it is, of course, Parliament: in France, the Assembly; in Germany, the Reichstag; in Holland, the States-General; in Spain, the Cortes; in Denmark, the Landsthing; in Greece, the Boule.

—The smallest inhabited island in the world is that on which the Eddystone lighthouse stands. At low water it is only thirty feet in diameter and at high water it is completely submerged.

—A gardener discovered the fact that trees are often sent to an untimely death by poison usually arsenic. The reason for this does not appear until one hears the man's explanation. Suppose a man has rented a house which has too much shade, the law will not allow him to have one or more of the trees cut down without the consent of the owner. As it often happens that tenants and landlords hold different views on the subject of shade, the trees remain as a bone of contention. It is then that the gardener is called to administer a dose of poison, for when a tree is dead the tenant may have it removed. Five cents' worth of arsenic is sufficient to kill a large tree. A hole is made in the trunk, arsenic dropped in and nature does the rest. It never fails.

—There is a large permanency in the Aegean sea, known as Hayes Horse, which extends three thousand feet above the level of the water. As the sun swings around the shadow of this mountain touches one by one a circle of islands separated by regular intervals, which act as hour marks on the largest sun dial in the world.

—Total American imports of bananas and cocoanuts last year were to June 30, 1904, twenty-seven million bunches of bananas and seventy-five million cocoanuts, of which New Orleans received in direct shipments nine million bunches of bananas, Mobile four million, Baltimore three million, New York 4,500,000, Boston four million and Philadelphia 2,500,000.

—In a table covering different countries France ranks seventh among saving nations, following Denmark, Switzerland, Belgium, Sweden, Norway and Germany. Another table, dealing with the average per capita of population, puts France tenth, or behind Denmark, Switzerland, Germany, Norway, Australia, Belgium, the United States, Austria and Sweden.

—The size of the Atlantic waves has been carefully measured for the Washington Hydrographic Bureau. In height the waves usually average about thirty feet, but in rough weather they attain from forty to forty-eight feet. In storms they are often from five hundred to six hundred feet long and last ten or eleven seconds, while the longest yet known measured half a mile and did not spend itself for twenty-three seconds.

—Tame snakes are used in Morocco to clear houses of rats and mice. The sight of a snake seems to terrify the rodents.

—One hundred years ago the fastest land travel in the world was on the Great North Road, in England, after it had been put into its best condition. There the York mail coach tore along at the rate of ninety miles a day, and many persons confidently predicted divine vengeance on such unseemly haste.

Poultry.

The Houdans.

The French fowls are classed as Houdans, Le Fleche and Crevecoeurs. The two latter are not at all popular in this country, and are in fact, very rare. Specimens of them are seldom seen, excepting at our fairs, and not often then. Not so with the Houdans. Although not so common as the Leghorns or Wyandottes, no community is well supplied without a few flocks, and a show room always has a good selecting of them. At the same time, they are not very common. A person who has a good yard of them always has calls for eggs at fancy prices. They are just rare enough so that they will be sought for, and once kept will be always highly valued and have a good name. The accompanying cut well represents a pair of Houdans.

They are a superior table fowl. Many regard them as the best fowl for flesh that is raised, also almost equal to the Leghorn for eggs, which are larger than Leghorn eggs.

There are very few fowls which lay so large an egg. The Black Spanish will do nearly as well. The Houdan is called by many the best general purpose fowl known.

The body is of excellent form and in the market presents a fine appearance. It is only necessary to show its five toes to get for it a quick sale. The Houdans are known as non-sitters. I have kept them for seventeen years, of the finest blood, and do not think I have had one case a year, of one wishing to sit, but they have been persistent layers.

The color of the Houdan is black and white mottled, the black predominating during the first year. They grow lighter with age. There is a crest on the head and a muff under the bill. This feature renders them somewhat objectionable to the farmer, who wishes to let them range the fields, exposed to hawks, but with a little attention this is of small account. One of the principal features of the Houdan is the five toes instead of the four, an extra toe in the rear of the foot, usually turning upward, always found on a fine bred Houdan. It is of no earthly use to the fowl, but is a race characteristic, and for that reason can not be dispensed with. The color of the legs is black and white mottled, and the skin is flesh color.

In selecting Houdans, the reader should avoid any red-tinged feathers in the plumage, and always look for a good crest, broad, fifth toe and V-shaped comb. The standard weight of Houdans is: Cock, seven pounds; hen, six pounds; cockerel, six pounds; pullet, five pounds. G. M. J.

New York.

Day's Work of a Poultry Farmer.

My first work early in the morning is to attend to the incubators. I always learn the temperature of the machine, and, if needed ajust the regulator and lamp flame before I open the machine. If the heat has varied from the 103 degree mark, and is much too low, I do not open the machine until night. This gives the eggs a chance to make up the lost heat. If I find the heat too high I cool the eggs down to about 95°. I reverse the egg trays each time I turn the eggs morning and night.

THE BROODERS.

I then attend to the chicks, those that are in the brooders first. I let the chicks out of the brooder, and then see what is the temperature of the brooder. I then adjust the lamp flame high enough so that it will make up for the heat that the chicks had generated when they were all in the brooder during the night. The bulb of the thermometer is held on a level (until the chicks are three weeks old) with their backs in taking the temperature of the brooder I keep the heat 95° to 98°.

I FEED THE CHICKS

for the first three weeks, on either the regular prepared chick feed or one made forty per cent. hulled oats, forty per cent. cracked wheat, ten per cent. cracked corn, five per cent. beef scrap and five per cent. grit. I feed this dry in litter and only a little at a time. The chicks that are old enough to be without a brooder I feed equal parts hulled oats, cracked corn and whole wheat, if it does not storm. I keep the doors open to the chicken houses until the last feeding at night.

THE HENS.

After the brooders and chicks have been attended to I feed the hens. The first feed for five mornings of the week is oats nine parts and ground-beef scraps one part, mixed together and fed dry in troughs. The other two mornings I feed a mush made of equal parts wheat bran, middlings, corn meal and beef scraps, mixed into a stiff dough. I leave the henhouse doors open all day unless it storms.

AFTER THE FIRST FEEDING IS FINISHED

I give them all fresh water. I see that all the drinking dishes are clean and place them where they will collect as little filth as possible. By this time with the chores it will be about 9 A. M. I then began feeding the chicks again and see what is the temperature of the brooders. If the sun is shining the brooders are liable to be too warm, and if they are I turn the lamp flame down.

THE WEEKLY SPRAY.

If the day is Friday I clean the brooder and houses out and spray them all over inside with a solution of water ninety-eight parts and creolin two ports, and put in new litter for them to scratch in. At 11.30 A. M. I feed the chicks again and also see what is the heat of the brooders.

AFTER DINNER

I visit the incubator room and see if the machines are working all right. At about 2.45 P. M. I feed the chicks again, and as the day is growing cool the brooders are liable to be low, and if so I turn the lamp flame up enough so as to keep the heat at the desired point. After this feeding is done I mix the night feed for all the chicks that are over six weeks old. A mush of equal parts wheat bran middlings, ground oats, yellow corn meal and ground beef scraps. I mix this in a stiff dough. At four o'clock or half past I feed the hens and gather the eggs for this feed. I have equal parts yellow corn and wheat. Of this I feed one quart to eleven birds, the same amount I fed of oats in the morning. If the weather is pleasant, the night feed I scatter around the yards; if stormy, I feed in the houses.

I MARK THE EGGS

from each hen and if there are any broody hens I shut them up in the crates I have for that purpose in the henhouses. I never shut them up out of doors, as they are liable to take cold. After the hens are cared for I trim and fill the brooder lamps and feed the little chicks for the night. I feed them all they will eat up clean this feed, if they have eaten each previous meal of the day as though they were hungry. If not I scant the feed until they appear to relish it. Better feed too little than too much. About half an hour before sunset I feed in troughs to the chickens over six weeks old the mush that was mixed about 4 P. M. I have this feed as near as I can one-third of their day's rations and feed all they will eat up clean. At this feeding I shut the large doors and leave the small doors open so they can go in and out of the house until dark. I now care for the incubators.

I ALWAYS TURN THE EGGS

before I fill and trim the lamps, as the hands must be free from kerosene oil when I touch the eggs or I am liable to spoil the hatch. After the chicks and hens are in for the night I close the small doors so they can't get out until they are let out in the morning. And this precaution also prevents any animal from getting in and killing the birds after the chicks are in the brooders for the night. I go to each brooder and see that they are not too warm. As a general thing I have to turn the lamp flame down, as the heat from the chicks' bodies will raise the temperature of the brooder from 5° to 15°, thus you may judge how important it is that the brooders should be cared for at this time.

BEFORE I RETIRE

for the night I usually visit the incubator room and see that the machines are right, and also go out doors and take a view of the brooder houses and see that everything is safe for the night.

I am often asked what breed of fowls are the most profitable. In answer to this would say it depends upon what your market demands where you sell your product. My choice of breeds are the Rhode Island Whites as I am the originator of this breed, but the Wyandotte, Plymouth Rock, or Rhode Island Reds are good business breeds and will yield a handsome profit if properly cared for. J. ALONZO JOCOY.

Rhode Island.

Fish for Poultry.

In preparing fish for fowls we prefer to chop them up raw, add a very little salt and pepper and feed in small quantities in connection with grain and vegetables; but for young chicks it is advisable to boil before feeding and simply open the fish down the line of the back bone, leaving to the chicks the rest of the task. This food should be given to layers sparingly, or we may perceive a fishy smell about the eggs, especially if the fish is fed raw. All who can will do well to try this diet for their flocks, and note its effect on egg production. We have always marked a decided increase in the rate of laying following an allowance of fish fed in moderate quantities.

There are hundreds of our readers who live near or on rivers or lakes, or the seashore, where they can get considerable offal fish, such as are either too small to market or are cast out as unfit to be sold. Hundreds of bushels of these fish are annually used for manure, either composted or plowed in direct. In this connection they are very good, though many a basket full could be put to better account by feeding them to your fowls; and they are very fond of this diet, though care must be taken not to feed it exclusively, for it may cause extreme laxity.

A Great Season for Storage Eggs.

The enormous arrivals of eggs have continued, last week being a record-breaker for the season. The storage men have taken hold with courage and have put away whatever stock the consuming market did not need. The result is that the storehouses are rapidly filling up. In fact, their capacity must be nearly approaching its limit. The New York Produce Review estimates the stock at Chicago, New York, Boston and Philadelphia at more than half a million cases, which compares with less than two hundred thousand cases at the corresponding time last year. If this reckoning is correct, egg storage has gone on at a rate somewhat dangerous for the future of the market. Not only is there considerable risk for the storage men losing money by the operation, but it looks as if the storage outlet would be pretty nearly closed in May for the lack of room to store the eggs. Such a condition would tend to bring about lower prices during May and the balance of the summer, and some dealers express the opinion that a drop is quite likely to take place. Much of the buying for storage has been done by the large concerns, like the Armour's and Swift's, who usually know what they are about and not only after careful study of the situation. It is evident that these people believe prices will not go much lower, else they would have waited before putting away so much stock. But if arrivals continue at anything like the present rate it is difficult to see who will buy them all at present prices.

Egg Prices Steady.

Both receipts and demand are larger than last week, hence the price situation holds about steady. Some Western markets show lower quotations and this condition is reflected in the price of eggs shipped here from a distance. These already begin to show the effects of warmer weather and do not average so good as they did a month ago, but nearby eggs hold their price well at recent quotations. Most of the eggs that will go into storage have already been put away, and eggs which are now used for that purpose are not of so good grade as the April packed, but they are selling a little cheaper, the bulk of sales being at 18 cents. The quantity in storage is enormous and there is considerable anxiety in the trade as to the outcome. The free buying for export has put money into the pockets of producers by keeping the price at a good fair level notwithstanding the heavy production.

According to current estimates, the cold-storage facilities for eggs are already quite fully occupied. Eggs are coming forward nearly as fast as ever, and the conundrum is what will be done with them when the storage people cease to buy?

Some dealers predict lower prices for May. It is fortunate for the cold-storage situation that the bulk of the eggs have been put by in April, when the weather was cold and the quality of those arriving from distant points excellent. Now that the weather is warmer in the West and Southwest, many of the shipments show signs of heat, requiring careful inspection, and assorting and are considered generally of a lower grade than the April eggs. Possibly prices will go down in May, but the quality will also be less desirable of distant eggs. So far, this season has favored distant shippers, having been able to compete rather closely with Eastern producers because of the cool weather during shipment. A spell of warm, summery weather would quickly cause nearby eggs to sell at a more decided premium.

PRIZE PAIR OF HOUDANS.

Horticultural.

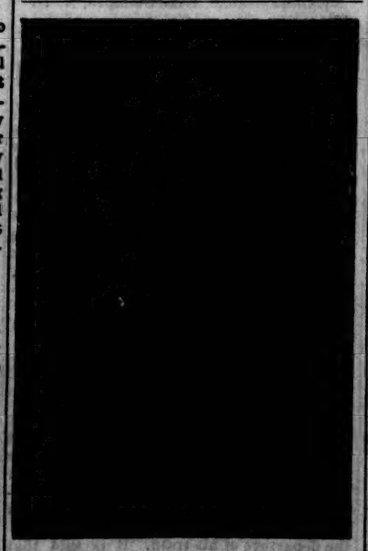
Making and Using the Bordeaux Mixture.

One of the easiest ways of preparing stock solutions is to use a vessel of known capacity, fill it with water to the desired point, then enclose the required quantity one pound to a gallon of copper sulphate crystals in a coarse sack, such as a bran sack, and suspend them in the water from a stick or board laid across the barrel. The crystals will dissolve more quickly if not too deeply immersed in the water. In the case of the lime weigh out the desired amount, one pound to the gallon, and slake it in a barrel, adding just enough water at first to prevent burning and at the same time thoroughly slake the lime, after which it can be made up to the required volume with water.

The stock solutions were made so that each gallon of the solution represented one pound of the copper sulphate or of the lime. The formula used in making up the Bordeaux was that known as the 1-10 formula, that is, one pound of copper sulphate and one of lime to every ten gallons of water. Hence in making up fifty gallons of Bordeaux, all that was necessary was to transfer five gallons of each of the stock solutions to the dilution barrels, and fill them up with water to the twenty-five gallon mark.

Some authorities recommend a stronger stock solution of copper sulphate than that mentioned, that is, instead of one pound to a gallon, two pounds are used; and others advise a saturated solution, claiming for the latter that when such a solution is used no change in its strength can occur by evaporation, as it is always at the saturation point. A saturated solution contains about three pounds of copper sulphate to the gallon. If the weaker standards are used the only precaution necessary to observe when carrying over a stock solution is to mark the height of the liquid in the barrel and restore it to its original volume before using.

The time of application is not always wisely chosen. For example, the first spraying for apple scab should always be made before the buds have swollen very much. A spraying at this time will ordinarily do more toward ensuring freedom from scab than subsequent ones, the ultimate success is, however, dependent on one or two subsequent ones, any one shortly after the blossoms fall, followed by another from ten to fourteen days later. In the same way the codlin moth can only be controlled by spraying with arsenites, which may be added to the second Bordeaux application for scab, shortly after the blossoms fall.—W. Stuart, Burlington, Vt.



SPRAYING WITH BUCKET PUMP.

This is an excellent outfit for the garden and the city yard.

When and How to Plant Strawberries.

Early Spring, just as soon as ground can be easily worked, is the best time. If possible give them new land just cleared from the woods. The soil should be worked deep, but keep the subsoil where it belongs. If planting on old land, apply fifteen to twenty cords per acre of stable manure—one-third of that amount will do on new land. The next best fertilizer is bone and ashes, one ton of bone and two tons of ashes per acre. Put the plant food on top of the furrow and harrow it in.

If a large field is to be set make rows 3½ to four feet apart, set plants eighteen inches in the rows. In August place the new plants about six inches apart, till the width of the row is twenty inches, then cut off all runners beyond this width. For a small bed set plants in three rows one foot each way; then leave a path thirty inches and set three more rows. Keep all runners cut off. Every runner you cut off causes the parent plant to send out a side shoot, so at the end of the season they will be very large plants, and will bear from a pint to one quart each of large fruit. When setting plants have the crown just level with the top of the soil. Be sure to press the earth well about the plants.—S. H. Warren, Weston, Mass.

Fresh Fruit.

The apple situation shows no marked change, choice fruit being in steady demand at quotations last given. Receipts during the past week were somewhat larger than for the preceeding week, but the per cent. of good fruit was limited. Some strictly fancy lots sell higher than quotations given in our market columns.

Cranberries are in very light supply and demand and out very little figure in the market. Southern strawberries mostly from North Carolina are in heavy supply at very low prices, ranging from five to twelve cents in large lots. Bananas continue very plenty and cheap. The price by the single bunch for large-sized green fruit is in the neighborhood of $1, but in larger lots much lower prices have been quoted.

The Peach Crop in Georgia and Connecticut.

Latest reports from the Georgia peach region cut down the estimated crop considerably, current estimates being over three thousand cars, compared with five thousand of earlier estimates and not over three-fifths of last year's crop.

J. H. Hale reports his large Georgia peach orchard escaped the various freezes with slight injury and he expects a larger crop. Of the Connecticut peach crop Mr. Hale says the cold spring is favorable for the peach crop, because it holds back the buds and checks too rapid development. He expects a large yield in New England from present indications.

Onion Growers Hopeful.

Onion growers in the Connecticut valley have been enthusiastic all through the winter, having sold their last crop at a good price. It looks as if the planting this year would be very large, especially in the northern part of the valley in Sunderland, Deerfield and Whateley, and also farther south, although the tobacco enthusiasts are more numerous than in the northern towns and are equally enthusiastic over their specialty which last year was very profitable. Many of the valley onions were sold in the vicinity of $1.25 per bushel.

Apple Exports.

According to Mr. Cochrane, the well-known Boston exporter, the apple season has been a bad one for the exporting interest, the average of prices not having been sufficient to show much profit. "Just now the foreign quotations for choice apples are fairly good, but apples which will stand exporting at this season and show up choice at the end of the journey are scarce and hard to get. Many of the apples now coming from Maine and New Hampshire and Vermont are hardly worth shipping. All through the season, in fact, apples arrive which are not fit to sell and ought to have been fed to the pigs. Such fruit is partly owing to the poor grading. There ought to be a law requiring uniform, standard grading. Some of the fruit comes from old trees neglected and worthless. A man is a fool to bother with such trees. He ought to cut them down and not spoil the rest of his fruit by mixing with it. Many of the apples from old trees are damaged by insects and railroaded inside so as to be worthless."

The total apple shipments from all ports for the week ended April 29 were 12,258 barrels, including 2459 barrels from Boston, 4023 barrels from New York, 460 barrels from Portland, Me., 836 barrels from St. John and 4533 barrels from Halifax. The shipments included 7309 barrels for Liverpool, 4818 barrels for London, ninety barrels for Glasgow and 138 barrels for various ports. For the same week last year the shipments were 5483 barrels. The total shipments thus far this season have been 2,261,014 barrels, including 663,264 barrels from Boston, 636,047 barrels from New York, 304,175 barrels from Portland, Me., 267,681 barrels from Montreal, 354,275 barrels from Halifax, 19,874 barrels from St. John, N. B., 3500 barrels from Wolfville, N. S. and 24,108 barrels from Annapolis, N. S. The shipments for the same time last season were 3,662,759 barrels; in 1903, 2,461,-933 barrels.

Owing to weather being too cold and dry in Florida, the tomato, bean and peach crops of the west coast are reported reduced about one-half of the crop in favorable seasons. The strawberry crop is expected to be a good one.

—Experts believe that a great naval battle in the Far East may not occur for some weeks. Possibly Togo will try to worry and destroy the enemy by degrees without loss of his own ships. The Japanese are reported to be recovering several of the Russian war vessels sunk at Port Arthur. The report that the Russian fleet is to make for Petropaviovsk instead of Vladivostock is not credible. The supposed destination is a small harbor on the east coast of the Kamchatka Peninsula, and is 1500 miles sailing distance from Vladivostock. As a base, it is useless for attacking the Japanese communications; the Russian fleet there would only exchange the Perouse Strait for that of Korea as an entrance to Vladivostock, and the chances at the latter straits are not hopeful. To use it would mean a long detour through the Pacific, and the limits on the carrying capacity of the fleet would make it little better prepared for a "dash" from that port than from Nhatrang Bay.

—The Sahara Railroad, one of the most gigantic and important works undertaken by the French Government, a road that is to connect Oran and Timbuctoo, is nearing completion. The line from Saida to Beni Unif is now in operation, both for freight and passenger business. The construction of the road has been a most difficult task. A great many abysses had to be crossed, long tunnels bored and many hills had to be blasted. The construction expenses have so far amounted to $40,000 per kilometre (three thousand feet), and the last part of the road may prove equally costly. Fortified stations have been established along the route at intervals of twelve miles. The road is narrow guage, except the line from Saida to Oran, which is of standard guage.

—A miniature Coxey's army is forming among the striking army boot workers in Northamptonshire, England. It is proposed to march on the War Office in London and lay the men's grievances before the officials. A band of music has been engaged to accompany the strikers, whose march will probably occupy a week.

—Charles Hatfield, a "rain-maker," who has been working since Dec. 15 last to produce eighteen inches of rain for Southern California by May 1, on a pledge of a number of Los Angeles merchants to pay him $1000 if he succeeded, has completed his demonstration and has been paid a large proportion of the sum promised. The remainder of the amount guaranteed him will be paid shortly, it is said. The fall of rain in Los Angeles during the season ending May 1 has been 19.96 inches, which far exceeds the fall of last season, and is above the normal annual precipitation for this section. Hatfield established his "rain-making" plant at Altadena, in the foothills of the mountains, some twenty miles from Los Angeles, on Dec. 15, and the amount of rainfall from that date in the immediate locality of his place has been 26.49 inches. Hatfield's method is a generation of gas and its discharge into the atmosphere from a chimney, which has the result, he claims, of attracting forces of nature which compel moisture to form and be precipitated in the shape of rain.

Of all inventions that have come to lighten the burden of heavy work incidental to farm life, none is valued more highly than the cream separator. The "De Laval" was the original separator and has always maintained a reputation for being a unique and first-class improvement. For efficiency and durability it ranks high among its many competitors and proves itself a rare boon to its possessors. The De Laval replaces the wearisome drudgery of former years with speedy and satisfying service and fills every need in the line of dairy industry.

MASSACHUSETTS PLOUGHMAN
NEW ENGLAND JOURNAL OF AGRICULTURE.

TELEPHONE NO. 3707 MAIN.

Tech and the Merger are apparently out.

The women in the Chicago strike are hardly fair.

Stop singing "Bedelia." It appears to be a costly amusement.

Adulteration and appendicitis are said to be twins. They go together.

Do not lock up money for labor unless dollar for dollar is in plain sight.

When women clothe themselves on sixty-five, will Edward Atkinson be alive?

Beautiful fan effects are to the fore, but they do not include the fans on the base-ball grounds.

Lewis E. Dinsmore was an engaging young man, but three years on Deer Island may dim his fascinating qualities.

It has been pretty plainly shown lately that jurors do not keep the secrets of the jury room, at least in New York.

We are not anxious to have that naval fight in the Far East come off, but we have been a long while waiting for it.

The firebug has been so active in our city that there is a well-founded suspicion that he can multiply himself indefinitely.

The police have had a hard time listing the voters of Boston, but they were, no doubt, strenuously attentive to their duties.

By-and-by we shall learn how to build court houses large enough for legal purposes by looking into the future far as human eyes can scan.

Belmont Park cost in the neighborhood of $3,000,000. This was a tidy sum for August to spend on a gift to the lovers of horse racing. More speed to him!

With no less than 127 Massachusetts village improvement societies, the farmyards, lawns and village places in the old Bay State should fairly shine.

The reduction of Kuropatkin's salary to $54,000 a year will not evidently make him a poor man. Most of us could get along comfortably on the sum designated.

The members of the Y. M. C. A. do not want any players in theirs, and yet Corbett, Gentleman Jim, is a good man if not a good actor. Some people are so particular!

The way of matrimony is not all sunshine for comparatively poor girls who wed prospective rich husbands. Love in a cottage is often happier than love in a palace.

The services of the Rev. Reuen Thomas have been well rewarded. The sincere recognition of his thirty years work is, however, more valuable than the princely gift.

General Linevitch had a kissing party, where is that party now? If his soldiers are like the majority of men they would rather have kissed some one else besides their commanding officer.

High priced help requires a high grade employer to get back the money that is paid out for labor. An hour's time wasted means more than it did when good hands could be had at $12 a month.

Chaplain Hale, of the United States senate is no bigger man than Dr. Hale of Boston, as his welcome home has abundantly demonstrated. He is one of the prophets that is honored in his own country.

To increase the farm income the young men's way is to earn more, while the old man's plan is to spend less. The thrifty farmer's wife combines both ideas and hits the golden mean of farm prosperity.

Innocent or guilty, Nan Patterson has suffered more mental agony than usually falls to the lot of girls who are following the pace that she struck in a vain and silly life, the end of which is usually disaster of some kind. The gayety that goes with feminine dishonor is generally appalling, though it may not always point to capital punishment.

At the funeral services of Joseph Jefferson the Rev. Mr. Horton's tribute was a modest and manly one, in which superiority was claimed for no honest profession by which man earns his daily bread. The true Christian is one who loves his fellow men, and Mr. Horton pointed him out in the person of the lifelong actor, who made friends among both the humble and the exalted.

The immigrants are pouring into this country. Twenty-six thousand arrived in New York this week. Well, we suppose we can stow them away somewhere on this vast continent, though they must remember that they cannot pick up gold on our thoroughfares. They've got to dig for it. In fact, if more of them would go into the country to use the shovel and hoe, the immigration question and the problem of farm help would both be nearer solution.

The oleo interests receive another hard blow through the decision of the Pennsylvania Supreme Court upholding the oleo act of 1901. It restricts the sale of oleo colored to resemble butter. For some time past the oleo contest has gone all in one direction, like the Japan-Russia war. The dairy farmers are having the opportunity of their lives, and they have been making and selling honest butter at good prices, while the courts have been fining their oleo competitors.

The Massachusetts Dairy Bureau has been very active this year. Agent P. M. Harwood reports that about one hundred cases have been carried to court and won during the past four months, Jan. 1 to May 1, and fines agregating $2,000 have been collected. These cases were connected with the sale of oleo and renovated butter. The dairy bureau in Massachusetts is one of the busiest and most useful departments of the State Board. To employ a specialist pays well even to fight the oleo evil.

If Dr. Harper has really been cured of cancer by radium, we shall have a remedy for a dread disease that will be a blessing to thousands of suffering people. Of all the ills that attack our frail bodies there is nothing more painful than cancer. It is a living death, like leprosy, which is happily rare in this country, and the discovery of radium, if it fulfills its promise, will be counted among the greatest and most beneficial discoveries of our age. Dr. Harper believes in its efficacy and so far his firm faith is undisturbed.

The State of Massachusetts has at last committed itself to a renewal of the moth campaign. But nothing can now make up for the time lost during the years the work has been stopped. At that time complete victory was in sight. Moths were so scarce that hostile critics claimed there was no reason for alarm. According to expert opinion a few years more of effort would have killed out the last gypsy moth, and quite probably the brown-tail variety might also have been destroyed. Now to all appearances the nation is saddled with both pests to the end of time, and the money that would have sufficed to destroy them will be spent over and over again merely to keep them in check.

Foresters will note with attention the progress of the extensive planting of white pine in New Hampshire under direction of State Forester P. W. Ayers. The trees, although from a Wisconsin nursery, are of the common white pine variety, and are set on cheap stump land. Trees and labor cost about $6 per acre. From this investment of $6 at compound interest at six per cent., a return at the end of forty years equal to ten per cent. yearly has been figured out at present prices of pine lumber. But the estimate takes no account of other items. The average farmer would be more likely to call $6 the value of the acre of rocky stump land. He would pick up his trees from some open field adjoining an old pine grove. Labor he would reckon at low cost by the month rates, but he would add a considerable item for taxes and insurance or risk of fire, and something for annual care. But the price of good pine lumber is fast advancing, and very likely by the time newly planted groves are ready for the saw-mill the value will be high enough to offset all extras and net the planter or his sons a liberal interest on the investments.

The world's wheat crop for 1904 as estimated by the Department of Agriculture was 3,162,404,000 bushels against 3,230,533,000 bushels in 1903, showing that the shortage was general and that the prices which prevailed all winter were in some measure justified. Yet it is evident that the shortage was not great enough to cause such an extreme advance in prices and the recent drop in quotations is more in line with the actual conditions. It has been maintained all along in these columns that the price of wheat was too high. North America's share of the wheat shortage was about ninety-three million bushels, while Europe fell short over one hundred million bushels. Asia, South America and Australia show some increase, but not enough to off-set the general decrease. Summing up the present grain situation from the feeders' standpoint prices of cattle food are just now about as low as they are likely to be for the present, and any unfavorable crop development would send prices up again. Those who buy now for some months supply, obtain the feed at a reasonable price and insure themselves against the possibility of advancing markets later in the season.

The Weather at Long Range.

The value of a fairly exact knowledge of the weather for some time in advance would be so great that it is not surprising that many attempts have been made to get useful results in this line. It must be said at the start that predictions based on planets and the various predictions that appear in almanacs published a year in advance are wholly worthless. While they occasionally hit the weather right by chance, it is only necessary to note them carefully for a few weeks to be convinced of their worthlessness. Those predictions which pretend to apply to all parts of the country are still more absurd, because the weather differs so greatly at the same time in different localities.

The only method of prediction which has received anything like scientific endorsement is that based on sun spots, and even here it must be said that the results at present are too uncertain to amount to much in a practical way. It has been found that the earth's temperatures, at least in the tropics, are higher when the sun spots are fewest, and lower when the sun spots are most numerous. It seems, also, that when sun spots are numerous there are more severe storms, drought and weather disturbances in general, and these conditions apply not only to the tropics but to the temperate regions.

The sun spots appear to occur in periods of about eleven years, that is, there is a space of about eleven years between the time when they are most numerous and the time when they are least numerous. It might seem safe to predict that years of severe changes, including cold winters, hot summers, drought, tornadoes, etc., would occur during certain years, and the records of the past show some little basis for such a theory, but there are enough exceptions to make the idea of very little practical value, and conditions alternate so greatly in different parts of the world that it is difficult to draw the line how far the changes will occur and at what time in any given locality. The experts in Washington, who have studied the subject with special care, seem to conclude that as yet nothing can be absolutely determined and that further observation and tests will be necessary before it can be decided whether any practical results can be obtained.

The School for the Blind.

The trustees of the Perkins Institution and Massachusetts School for the Blind, in the seventy-third annual report of the institution for the year ending Aug. 31, 1904, say that the school has been managed with assiduous care and commendable efficiency, that the objects for which it was established have been pursued with constant diligence and gratifying success, and that in many respects the year noted has been one of the most satisfactory in its history.

The report points out that the system of instruction and training has met with careful re-adjustment in recent years, and that now every effort is made to develop the physical powers and cultivate the minds of the pupils at the same time. It calls particular attention to the value of physical training in the education of the blind, and it regards the gymnasium as one of the most important features in the plan of instruction in the institution.

Manual training here has been pursued, we are informed, with steady application, and with a view to develop the brain as well as to teach mechanical skill. The departments of literature and music have also been effectively conducted, and have greatly conduced to the welfare of the pupils.

Treasurer William Endicott's report shows that there was cash on hand on Sept. 1, 1903, $46,000.32, with total receipts for the year of $376,770.42. The total expenditures and investments were $216,693 03 and the balance in the treasury Aug. 31, 1904, was $16,078.31. This is in every way a commendable showing of the skillful way the finances of the institution are managed.

This, however, does not indicate that the school is not in need of further financial aid, as many people have erroneously supposed, for the annual income which it derives from State appropriations and from the endowment fund is not large enough to cover the cost of carrying on the work of the various departments, and it is shown that the expenditures for the year were $76,619.75 and the receipts from all ordinary sources were $74,585 55. This it will be seen leaves a deficit of $2,034.17, although current expenses were reduced to the lowest possible figure. This statement indicates the need of additional funds for carrying on the institution which the philanthropic should consider. It has had many generous benefactors, whose charitable efforts are commended in detail in this clearly arranged report of the trustees, Frances H. Appleton, William L. Benedict, William Endicott, Paul Revere Frothingham, Charles P. Gardiner, N. P. Hallowell, J. Theodore Heard, Edward Jackson, George H. Richards, William L. Richardson, Richard M. Saltonstall and S. Lothrop Thorndike.

The report of the devoted Director Michael Anagnos is comprehensive and highly interesting, and the allusions to notable pupils are full of food for earnest thought.

Poisonous Plants.

Hemlock or Wild Parsnip—This plant, so often used by the ancients, is a familiar weed of our fence rows and roadsides. It is a rank-growing, hollow-stemmed biennial from two to five or six feet high, with large, parsley-like leaves and big clusters of small white flowers. Cases of poisoning have arisen from eating the leaves as parsley and the roots as parsnips; and serious results have in some cases followed the blowing of whitles made by children from the hollow stems. Domestic stock has been killed as a result of eating the plant, so that hemlock should be extirpated as far as possible, instead of being, as it often is now, left to produce seeds, and thus propagate itself.

Cockle—This whitish, woolly annual is also a familiar weed on most farms, more particularly on wheat lands. Poisoning with this plant is generally brought about by feeding animals and poultry on the low-grade flour containing cockle seed. The weed seeds can be removed by proper machinery, but the task is not an easy one; so that poor flour often contains cockle. The United States Department of Agriculture states that as much as thirty to forty per cent. is sometimes found in European countries, but that this quality is sent out only by ignorant or unscrupulous dealers, or is intended for consumption by animals only. The simplest way of preventing this weed is that of planting only wheat seeds that are perfectly free from it.

The Death Cup—This handsome fungus (Amanitaphalliodes) somewhat resembles the common mushroom, for which it has often been mistaken. All parts of the fungus are nearly white, excepting only the top, which may have a yellowish or greenish shade. There should be no difficulty in distinguishing the death cup from the common mushroom, as it has white gills, and is usually found growing in woods or near their borders in meadows. There is no objectionable taste to warn the consumer, and symptoms of poisoning do not occur until from nine or more hours after the fungus is eaten. The death cup is the most poisonous of common fungi, and its consumption results in death in from two to four days.

Deadly Nightshade—This annual weed has drooping clusters of small, white flowers, and produces black juicy berries in autumn. Poisoning has occurred in man and in some kinds of domestic stock. Though the symptoms of poisoning by deadly nightshade are very serious, cases do not often result fatally. The plant is, as already mentioned, an annual one only, and can be eradicated by the very simple expedient of cutting down the plants before the fruit matures, so preventing propagation by seeding.

Castration of Calves.

Put a halter, or noosed cord, over the head and round the neck, and pass the shank inside the off thigh. Two men are required for a stout calf, and take their stand on the near side. One, holding the off ear in his right hand, and with his fingers and thumb grasping the lower jaw, or holding the nose, lifts the head, and the other, reaching over the back and grasping the off flank, lifts the body, laying the animal gently on the near side, preferably, of course, on a bed of clean straw.

The off hind leg is then drawn towards the head as far as it will go, a hitch being taken round it above the hock. The man attending to the head is handed the end of the cord, and the second assistant takes a firm grip of the hock in the hollow in front of the Achilles tendon. In this way two men, with only a strong horse halter, can hold a yearling bullock with safety, while one, if strong and active (and we may add, willing and determined), can hold a stout calf.

The operator lightly places one knee on the quarters of the calf, gathers up the testes in his left hand, so as to tighten the scrotum over them, and makes a single long incision, on which the gland pops out. Having exposed the testicle and freed it from the tunic, the point of the knife is inserted through the fascia behind the cord, and the non-vascular attachment divided, the cord being stripped upwards with the fore finger and thumb until about the termination of the convolutions of the spermatic artery, while at the same time the gland is pulled down. The gland is then rapidly twisted round from left to right half a dozen times, the twists naturally running to the slenderest part, and traction is then made until the artery breaks, and the cord is scraped through with the heel of the knife, which is kept blunt for the purpose. The other gland is removed in the same way, the two incisions slit into one at the most dependent part of the scrotum, so as to provide for good drainage, and the animal allowed to rise.

Nothing is applied in the way of dressing, and no instruments are employed except the knife and the fingers, care being taken that the former is sharp, and that both are scrupulously clean. All bovines are operated on in this way, from fourteen days upward, except that with bulls a different method of casting and securing is adopted. No trouble is experienced from hemorrhage, and no complications occur. We consider from two to three months the best age at which to castrate calves, but for a variety of reasons they are commonly left longer. The weather may be kept—and this need make much difference to go—mal under cover—the operator does not "happen along," or the owner is undecided whether to keep the animal for a stock bull. The older the animal the greater the risk of loss—if only because the calf has become more valuable from lapse of time and cost of keep, and therefore some time within the limits of age named should be selected, when the risk is very slight.

Our Southern Competitors.

During three days last week over 200 cars of strawberries were shipped from Chadbourn, N. C. These went to all parts of the country and had considerable effect on the market situation. The quality and condition of these reaching Boston was excellent.

Early shipments of California cherries are on sale in New York and other cities. Indications are that the crop is light. Reports from California indicate that apricots and plums will be a usual crop, but the yield of pears greatly reduced by the blight in central California.

Dewberries will be shipped from North Carolina in considerable quantities this year for the first time. One grower expects to have about two thousand crates, beginning to ship about June 1.

The Missouri apple crop is reported promising and State Horticulturist L. A. Goodman predicts a banner crop, barring accidents. Even the young trees are said to be full of fruit. This section last year had a poor crop.

The vegetable situation in Florida has been greatly helped by recent fairly heavy rains. The tomato crop is greatly improved, and shipments will be large. Cucumbers appear to be very plenty in Florida this year, some of them being grown with irrigation.

Shipments of Texas Bermuda onions began about the first of the month and movement of stock has been active during the week, some lots being shipped to the Pacific Coast as well as to the more Eastern markets. Indications are that the crop will be moderate and the prices profitable to growers.

The heavy receipts from the South of new potatoes already exercise some little effect on the market. There were several thousand barrels from Bermuda last week besides something like a hundred carloads from Florida, mostly going to New York and Chicago to be distributed from those points. Indications are that the price of new potatoes will go down quite fast from the opening figures of about $5 to $6 per barrel.

Grange Considers Nature Study.

What action can the Grange take to secure the introduction of nature studies in the public schools? The subject was well discussed at the last meeting of Rockland (N. H.) Grange by Mrs. Blood, Mrs. Austin, Mr. Blood and Mrs. Hutton, the disputants agreeing that the only way was to arouse public sentiment in its favor. As mental development was the end sought, it could be obtained as well through studying subjects that afford information as well as studying those that afford only mental discipline.

It was considered much better for the children to learn about the plants and the action of the air on the plants combined with the action on the soil to promote plant growth, and to learn about the birds and the composition of the rocks which they pass every day, than to study dead languages. A former teacher made this exception, languages and higher mathematics are all right for those who can afford time and money to acquire the knowledge; but for the average student who must be content with the advantages afforded by a public school, it is far better to become familiar with the works of nature. Their views of life would be broader and they would be happier with this knowledge than they possibly could be without it, whatever their future occupation might be.

Commence nature studies in the home by teaching the child to love the birds and care for the tender plants which God has so profusely strewn everywhere. A special meeting will be held for conferring first and second degrees May 8.

MRS. INA E. BARTLETT, Lecturer.
Rockland Grange, Lake Sunapee, N. H.

Traveling in India.

REV. DILLON BRONSON OF ST. MARK'S CHURCH, BROOKLINE.

India is a land of contrasts: A land of marble palaces and hovels made of mud, matting or tin cans; a land of representative government and Oriental filth; a land of hoary philosophies and hideous idolatry; of sky-piercing snow mountains and scorching plains; of solitary wastes and states with nine hundred people to the square mile, etc. One-fifth of the human family live in this land, speaking many languages, holding many faiths, and conquered because divided among themselves. Every one desires to see India, and the American who is privileged to spend two winters here and escape before the furnace blast of May, is favored indeed.

Traveling is not so rapid nor so luxurious as in "the States," but it is cheaper; and the native whose income is five cents per day, and whose standard of speed is the ox cart, cares much more for the one than for the other. Time is nothing in this unhastening East, and the Indian often goes to the railroad station twelve hours before the departure of his train. It is said that they sometimes offer less than the regular price of the ticket, and pay several visits to the office before they can be convinced that these bits of pasteboard sell at a fixed rate. In small countries trains start at convenient times, but in India, if one wishes to travel by "the mail" at the great speed of thirty miles an hour, he must often board the train in the middle of the night. Local trains jog along about fourteen miles an hour. They make long stops, during which one can get a fair meal in the station for fifty cents, and must often show his ticket to an inspector, who writes down its number for no apparent reason except to give employment to another man in this overcrowded land. Even the slow trains are preferable to travel by tonga, bullock cart, ekka, camel, or elephant—all of which one samples during a winter's visit. Nearly all natives travel third class on the railroad, paying about one cent for three miles. They are crowded into the small compartments like fowls into a crate, and when the guard strikes a suspended piece of railroad iron with a hammer, as a signal that the train will depart in five minutes, there is great shouting and a scramble even for standing room. The people all walk softly with their bare feet, but they make enough noise all the other end of their anatomy to compensate. The missionaries usually travel "intermediate," between second and third, but the native guard, always eager to oblige a white person, often puts them into a higher class. The rails are far apart at the side in the cold season, to allow for expansion in the torrid heat; consequently the jolting experienced by winter travelers is very annoying. The telegraph poles are usually of stone or railroad iron, and the distance from termini is plainly marked in miles and fractions on every pole. Second-class travel, in carriages painted white, costs about one and a half cents a mile, and special compartments are always reserved for ladies. Some benches on the long station platforms are marked, "For Europeans only," but no discrimination against Americans is intended. Each compartment has two seats and two shelves running lengthwise, to accommodate four persons at night. The seats are covered with rattan or leather, which is much cooler than the fiery plush used in America, while "tatties" shower cold water over the car to cool the air. Window glass is smoked to keep out the glare, and ice-cold drinks are constantly offered to the thirsty passengers. Every one, of course, carries his own bedding, and reserves his berth by sending a note to the station-master. Great rolls of quilts and pillows make it appear that one has much luggage, and we often felt like immigrants landing in New York. However, this is the custom of the land, and when one goes to visit a friend he finds only a bedstead, and must provide everything else, even to towels, himself. We long ago became reconciled to carrying our own toothbrush and soap, but do not like to take bedding and towels. The hotels of India are usually vile, but the hospitality of English residents and American missionaries is unbounded, and if one has letters of introduction he sees the inside of but few hotels.

All foreigners in India take "chota hazri," little breakfast, in their bedrooms. The tea, which English people serve about seven times a day, is very strong, and the gutta percha toast reminds one of a cheap London boarding-house, where toast is kept in cold storage and is of the consistency of an American rubber shoe. Englishmen generally take whiskey and soda with their seven-thirty dinner, but I am glad to note that they drink less brandy than when I was here fifteen years ago. One wonders that the rulers of this land can use so much alcohol in such a climate. In London, where the sun seldom shines and the atmosphere in winter is like cold pea soup, it is comparatively easy to find excuse for English indulgence. But the habit of constant "pegging" in torrid India is a very foolish one, to say nothing of the expense and the terrible example set to natives who are like children, incapable of selfcontrol. It should make any white man blush to hear a Mohammedan say: "No, I could not be a Christian, for I cannot drink ardent spirits."

The beef is very poor in India; the omnipresent mutton served with cabbage and carrots at all English tables is a little better than the beef. Chickens are very fair and cheap, and many have "entered the ministry" since we arrived. Nearly all the animals one sees in India are very thin. The cab horses and camels must "stand twice in the same place to cast a shadow." It makes one's heart ache to see the gharry wallah (cab man) beat his bone racks to keep them from toppling over in a heap. We saw many great herds of cattle and sheep which seemed to be feeding on gravel and dirt. Only the elephants and tigers and the well-to-do people are in good condition. We saw plenty of hungry jackals from the train and once half a dozen wild deer bounded past us. Wild duck and other game are abundant, as the Hindus religiously abstain from taking the lives of the lower animals. The past winter has been very cold, and we often suffered at night on the trains. Many have seen ice for the first time in their lives, and snow has been deep at the hill stations. The cold has doubtless increased the plague, and thousands are dying every day. We are told that the plague germ is received through the bare feet, and the overwhelming majority of Indians are too poor to procure any kind of shoes. Nearly all manage to find some sort of cloth to wind about their heads, however, making it appear as though the nation was stricken with neuralgia. Many native women carefully cover their faces, especially the mouth, but freely expose the feet and legs to the mid thigh. They generally use heavy silver anklets, toe and nose rings as savings banks. At Naini Tal, I saw the patient coolies of both sexes wading in snow two feet deep. The extreme cold, such as has not been known for a hundred years, has killed grass, trees and crops in many places, and multitudes of people will find it difficult this year to obtain the miserable pittance of two cents a day, necessary to sustain their feeble lives. Many who have lived in little huts will have no dwelling but the open plain, and no protection over their heads but a friendly tree. Frequently do the people, living under a tree, seem but little removed from the monkeys chattering in its branches. To be sure there are some strong and independent races in Hindustan; but the average Hindu appears very small and weak and serville "One could break his slender body over one's knee," and he sits all day under a dirty sheet or drags himself about like a sick man. His ideal is inaction, and he is so tired that the effort of breathing seems too much to be long sustained. The chief work of his wife and daughters consist in gathering cow dung, which they mould into cakes with their slender hands and when dried carry to market to be used for fuel or floor covering in the millions of little huts.

The Hindu is very religious. He sins religiously and satisfies his thieving and adulterous divinities. He is very patient, and when smitten in the face by a burly Britton without cause he utters no word of complaint. In one hotel I read this notice: "Visitors will please refrain from beating the servants and make their complaints to the landlord." In another hotel I saw a big English planter strike a slender boy such a blow on the cheek that I still feel the sting myself. They are a very patient people, and when Christianity—which is to fulfill Hinduism and Mohammedanism as it fulfilled the religion of Greece and Rome—has leavened all Indian society, the land of Hind may be the brightest gem in our Saviour's crown. Under England's rule schools and hospitals are multiplying, peace is universal, taxes are reasonable, and justice cannot be bribed. The Christian religion has a fair chance, and it asks no more. About three million people in India now sing "Hail to King Jesus," and before the close of this new century this number ill have increased thirty and perhaps sixty fold. Hallelujah!

The Western idea that New England land is worn out is a false notion. Farmers in this section who till their soil probably get more crops per acre than they do in the West. Our soil needs intelligent cultivation, and it will respond, but something besides main strength and awkwardness must be employed. Grow clover, grow cow peas and other plants which will enrich the soil.—J. H. Hale, Hartford County, Ct.

The Markets.

BOSTON LIVE STOCK MARKETS.

ARRIVALS OF LIVE STOCK AT WATERTOWN AND BRIGHTON.

For the week ending May 10, 1905.

	Cattle	Sheep	Shotes and Suckers	Fat Hogs	Veals
This week	3397	3596	177	22,345	2750
Last week	4991	3695	180	20,829	3117
One year ago	3464	6248	175	24,051	2923

Horses, 677.

Prices on Northern Cattle.

BEEF—Extra, $5.75@6.00; first quality, $5.25@5.50; second quality, $4.75@5.00; third quality, $4.00@4.50; a few choice single pairs, $6.00@6.50; some of the poorest bulls, etc., $1.50@2.50. Western steers, $4.30@7.10. Store Cattle—Farrow cows, $15@25; fancy milch cows, $50@70; milch cows, $30@48; yearlings, $10@15; two-year-olds, $15@20; three-year-olds, $20@30.

SHEEP—Per pound, live weight, 2.50@4.00c; extra, 4.60@5.40c; lambs, 5.60@7.80c.

FAT HOGS—Per pound, Western, 5¼@5½c, live weight; shotes, wholesale —; retail, $2.50@7.00; country dressed hogs, 6¼@7c.

VEAL CALVES—3@6c ₱ lb.

HIDES—Brighton—8½@9c ₱ lb; country lots, 7½@8c.

CALF SKINS—16@18c ₱ lb; dairy skins, 40@60c.

TALLOW—Brighton, 3@3½c ₱ lb; country lots 2@2½c.

PELTS—40c.

	Cattle.	Sheep.
Maine. At Brighton.		
W J Crouse	21	
F L Libby	20	
E L Libby	20	
Farmington L S Company	24	5
C E Hanson	15	
A D Kilby	10	
H M Lowe	15	
W B Deasey	10	
M D Holt & Son	18	
F W Wormwell & Son	14	
U C Libby	6	
Goodrich & Brown	22	15
New Hampshire At Brighton.		
A C Foss	26	4
At N E D M & Wool Co.		
A F Jones & Co	6	
Geo Heath		4
T Shay	4	
At Watertown.		
Wood & Moore	35	4
W F Wallace	70	25
Vermont. At Watertown.		
Fred Savage	13	10
Hall & Dorand	9	2
N H Woodward	7	
R E French	60	
E G Piper	11	
At N E D M & Wool Co.		
W A Ricker	35	12
B F Ricker	15	
F S Atwood	1	5
At Brighton.		
J S Henry	17	
Massachusetts. At Watertown.		
J S Henry	27	50
O H Forbush	20	
H F Whitney	10	
At Brighton.		
J S Henry	6	10
R Connors	60	
H A Gilmore	20	
Scattering	50	
D Simon	20	
J Gould	2	
W Mills	10	
Abrams & Fay	50	
L Stetson	46	
J Burnes	10	
Geo Cheney	10	
J B Fitch	7	
W Mills	19	
A Wheeler	17	
J O Brien	3	
J W Ellsworth	18	
A M Baggs	10	
New York. At Watertown.		
Brighton D M Co	26	
Western. At Brighton.		
M Goldberg	18	
J J Kelley	40	
A Davis	20	
W Macken	20	
Swift & Co	644	
Morris Beef Co	538	
S S Learnard	96	
S & Haley	128	
At N E D M & Wool Co.		
N E D M & Wool Co		2700
At Watertown.		
J A Hathaway	871	635
Canada. At Watertown.		
J A Hathaway		115
At Brighton.		
Swift & Co	74	

Export Traffic.

The prices on States cattle at the English market have declined from ½@¾c ₱ lb, d. w. The decline is not quite so much as the advance of last week. The range in prices, 11½@12½c, d. w. A few tops sold at 12½@13c. Sheep remain steady at 13@14c, d. w. The stock all goes to Liverpool and London. Shipments of the week, 2445 cattle, 750 sheep.

Shipments and destinations: On steamer Sylvania, for Liverpool, 201 cattle by Morris Beef Company; 646 cattle, 635 States and 115 Canada sheep by J. A. Hathaway. On steamer Castrian, for Liverpool, 697 cattle by Swift & Co.; 300 do. by Morris Beef Company. On steamer Cambrian, for London, 251 cattle by Morris Beef Company; 176 States and 74 Canada cattle by Swift & Co.; 100 do. by J. A. Hathaway.

Horse Business.

Market holds a steady position, values remain unchanged, and the disposals are not especially active, but quite fair. A good number of horses changed hands. More could be disposed of were they of the right stamp, weighing from 1300@1400 lbs, at a range of $180@200. At Myer Abrams & Co.'s sale stable they had in 6 carloads of well assorted horses. The trade was good and prices well sustained on all kinds offered. At H. S. Harris & Son's sale stable were sold 3 express and 1 freight carloads with no change in market. Acclimated horses were in good demand from $50@75. At Welch & Hall Co.'s sale stable were 3 carloads on sale, composed of big and medium grades, from $125@250, seconds at $25@150. They sold nearly 150 head. At Moses Colman & Son's sale stable were sold 75 to 80 head from $40@225; 1 pair family horses at $375. A number of ponies at $175@190. Good saddlers in demand at $200@250. At L. A. Brockway's sale stable auction trade was a little quiet with good retail demand.

Union Yards, Watertown.

Tuesday—Where good beef cattle were concerned there was a good healthy demand at strong prices. The slim grades were somewhat slow of sale at weak values. The trains being early the disposals were readily effected. H. F. Whitney sold 10 cattle, of 850 lbs, at 2@3½c. O. H. Forbush sold 6 cows, of 5860 lbs, at 4½c; 3 do., of 2540 lbs, at 3¼c. Western cattle were not in large supply. The high cost deters butchers from buying freely from this section.

Milch Cows and Springers.

Speculators were early at the yards ready to become owners of the better class of cows. Prices rule steady and fair disposals.

Fat Hogs.

Anything very nice sold at stronger prices. Some lots of local hogs at 6¼@7c, d. w.; Western at 5¼@5¾c.

Sheep Houses.

Sheep of best quality ruled 15c ₱ 100 lbs higher and lambs 10c ₱ 100 lbs lower, with rather more Western stock than a week ago. The bulk of sheep sales ranged at $2.12@5 ₱ 100 lbs. Lots $5.55 ₱ 100 lbs. Lambs at $5@7.40. Tops at $7.80 ₱ 100 lbs. J. S. Henry sold 12 spring lambs, $6 each. W. F. Wallace sold 45 shorn yearlings, of 80 lbs, at 5c.

Veal Calves.

The supply was heavy and butchers seem aware of the fact and bid accordingly. Mixed lots sell at 5@5½c. If selected and choice, better prices were paid. J. S. Henry sold 100 calves, 140 lbs, at 5c. W. F. Wallace, 100 calves, 130 lbs, at 5c.

Live Poultry.

Amount marketed, 72,000 lbs. Prices stronger. Fowl sold at 13@14c; chickens, 10@14c; roosters, 8@9c; broilers, 28@30c ₱ lb.

Droves of Veal Calves.

Maine—W. J. Crouse, 55; F. L. Libby, 40; E. L. Libby, 60; F. L. S. Company, 85; C. E. Hanson, 30; A. D. Kilby, 15; H. M. Lowe, 75; W. P. Deasey, 26; M. D. Holt & Son, 30; F. W. Wormwell & Son, 17; U. C. Libby 5; Goodrich & Brown, 50.

New Hampshire—A. C. Foss, 16; A. F. Jones & Co., 160; George Heath, 67; T. Shay, 60; Wood & Moore, 175; W. F. Wallace, 130.

Vermont—Fred Savage, 40; Hall & Dorand, 32; N. H. Woodward, 150; R. E. French, 100; E. G. Piper, 25; W. A. Ricker & Co., 434; B. F. Ricker & Co., 65; F. S. Atwood, 55; J. S. Henry, 110.

Massachusetts—J. S. Henry, 80; O. H. Forbush, 4; R. Connors, 80; H. A. Gilmore, 42; scattering, 175; D. Simon, 15; W. Mills, 10; Abrams & Fay, 15; L. Stetson, 10; G. Cheney, 10; J. B. Fitch, 18; A. M. Baggs, 16; J. P. Day and J. O. Brien, 15.

New York—N. E. D. M. & W. Co., 160.

Brighton, Tuesday and Wednesday.

Stock at yards: 2172 cattle, 34 sheep, 21,628 hogs, 1007 calves. From West, 1504 cattle, 21,590 hogs, 240 horses. Maine, 195 cattle, 20 sheep, 78 hogs, 488 calves. New Hampshire 26 cattle, 4 sheep, 16 calves. Vermont, 17 cattle, 19 hogs, 110 calves. Massachusetts, 356 cattle, 10 sheep, 55 hogs, 393 calves. Canada, 74 cattle.

Tuesday—2172 head of cattle found their way to the yards, with fair run, but not heavy for the home trade. Butchers make quick purchases of the best grades at a little stiffening of rates, while slim bologna stock ruled less active and hardly as strong, the requirements not being heavy. W. Mills sold 2 cattle, of 2140 lbs, at 3¾c. H. B. Deasey, 2 oxen, of 2780 lbs, at 5¼c. H. A. Gilmore, 20 cattle, of 700@1000 lbs, at 1½@3½c. J. B. Fitch, 1 cow a shade better than a bologna at 3c. R. Connors sold 60 cattle, of 700@1100 lbs, at 2¾c, 3c, 3½@3¾c ₱ lb, as to quality.

Milch Cows and Springers.

There was not a large run on the market and speculators were early buying the better grades, where they could do so with satisfaction to sell on Wednesday. Values run fairly steady; no difficulty in the selling of the better grades at $45@65 ₱ head. Some select even go $5@10 higher. F. L. Libby sold on commission cows from $35@60. J. S. Henry, 10 cows at $50@57.50; 5 cows at $45. A. D. Kilby sold 4 springers, $45; 1 choice cow, $60.

Veal Calves.

The supply was not over abundant, still no lack; numerous sales at 5c for mixed lots, but scarcely anything over 5½c unless very select. J. S. Henry sold 75 calves, of 135 lbs, at 4½c. J. O'Brien, 5 calves, of 840 lbs, at 5½c. C. E. Hanson sold at 5c.

Late Arrivals.

Wednesday—The beef cows showed activity, those having good beef cows on sale would have been glad to have had more at market, fully ½c advance. Milch cows in fair sale at steady prices. C. E. Hanson sold 1 milch cow at $30; 4 cows at $35@45. U. C. Libby sold 3 choice cows, $50 each. W. B. Deasey sold 8 beef heifers and cows, 720 lbs, at 3½c. Goodrich & Brown sold 33 calves, 3530 lbs, at 5c; 14 spring lambs, 660 lbs, at $6 a head; milch cows, $40, $55@57. M. D. Stockman sold 1 cow, 810 lbs, at 2c. M. D. Holt & Son sold 9 hogs, 1690 lbs, at 5½c; 1 fancy Ayrshire cow, $65; 20 milch cows, $30@50. F. L. S. Co. sold 1 bull, 1280 lbs, at 3½c; 1 cow, 700 lbs, at 2c; 82 calves, 9010 lbs, at 5c; 16 hogs, 3260 lbs, at 5½c; milch cows, $35@60. Libby Bros. sold calves at 4½@5½c; hogs at $5.70; milch cows, $35@60.

Store Pigs.

One hundred and seventy-seven head on sale at $2@7 a head.

BOSTON PRODUCE MARKET.

Wholesale Prices.

Poultry, Fresh Killed.

Northern and Eastern—	
Roasters, 4 to 5 lbs each, ₱ lb	18@20
Chickens, common to good	14@16
Ducks, ₱ lb	15@17
Fowls	13@16
Pigeons, tame, choice, ₱ doz	1 62@1 90
" com to good, ₱ doz	1 00@1 50
Squabs, ₱ doz	2 00@3 00
Western ice-packed—	
Turkeys, choice, young, ₱ lb	19@20
Fowls, choice, large, ₱ lb	14@
Fowls, medium	11@14½
Old cocks, ₱ lb	11@
Pigeons, choice, stall fed, ₱ doz	1 75@1 90
Pigeons, shot, ₱ doz	1 25@1 50
Pigeons, common, ₱ doz	1 00@1 25
Western Frozen—	
Turkeys, No. 1, ₱ lb	20@21
Turkeys, No. 2	16@17
Chickens, ch. soft roasting	16@
Chickens, average roasting	14@15
Broilers, 1½@2 lbs	18@19
Broilers, over 2 lbs	16@17
Fowls, choice	13½@14
Fowls, com. to good	11½@12½
Ducks	14@16

Live Poultry.

Fowls, ₱ lb	14@
Roosters, ₱ lb	8@

Butter.

NOTE—Assorted sizes quoted below include 20, 30, 50 lb. tubs only.

Creamery, extra—	
Vt. & N. H. assorted sizes	27@
Northern N. Y., assorted sizes	27@
Northern N. Y., large tubs	27@
Western, large ash tubs	27@
Western, asst. spruce tubs	27@
Creamery, northern firsts	26@
Creamery, western firsts	26@
Creamery, seconds	24@25
Creamery, eastern	22@26
Dairy, Vt. extra	25@26
Dairy, N. Y. and Vt. firsts	23@24
Dairy, N. Y. and Vt. seconds	21@22
Renovated	23@25
Imitation creamery	22@26
Ladle, firsts	22@23
Packing stock	16@18
Boxes—	
Extra northern creamery	27@
Firsts, northern creamery	26@
Extra dairy	26@
Dairy, first	24@
Common to good	22@23
Trunk butter in ½ or ¼-lb prints.	
Extra northern creamery	27@
Firsts, northern creamery	26@
Extra northern dairy	26@
Dairy first	24@
Common to good	22@23

Cheese.

NEW.

New York twins, extra	13½@14
New York twins, firsts	12@13
New York twins, seconds	10@11
Vermont twins, extra	13½@
Vermont twins, firsts	12@13
Vermont twins, seconds	10@11
Sage	14@

Eggs.

Fancy hennery	20@21
Me., Vt. and N. H. extras	19@
Me., Vt. and N. H., fair to good	17@18
Ind. and Ill. fresh laid	17½@18
Western, fair to good, ₱ doz	16@17
Southern, fresh	16@16½
Western dirties	15½@16
Western checks	16@16½
Storage packed, Western firsts	18@18½
Duck	22@25
Goose	40@

Potatoes

New Potatoes—	
Aroostook, Green Mountain, ₱ bu	33@
do. Hebrons, ₱ bu	30@
Sweet potatoes, ₱ bbl	3 25@3 75

Fruit.

Apples—	
Baldwins, large, choice, ₱ bbl.	1 75@2 25
Baldwins, No. 2, ₱ bbl	1 25@
Baldwins, fair to good	1 50@1 75
Greenings, ₱ bbl	1 50@2 00
Spies, ₱ bbl	2 00@4 00
Kings, ₱ bbl	3 00@4 00
Ben Davis, ₱ bbl	1 50@2 00
Russets, No. 1	1 75@3 25
Cranberries—	
Cape Cod, choice, ₱ bbl	5 00@8 00
" " fair to good	5 00@6 00
" " ₱ box	1 50@2 50
Oranges—	
Florida, ₱ box	1 00@2 25
Strawberries, So., ₱ qt	8@15

Green Vegetables.

Asparagus, So., large bunches, ₱ doz.	1 50@ 3 50
" native, ₱ doz	1 25@ 2 00
Artichokes ₱ bu	1 50@
Beets, ₱ bu	60@
" hothouse, ₱ doz	2 00@
" Southern, ₱ 100 bunches.	3 00@ 5 00
Beet greens, hothouse, ₱ bu	75@
Carrots, ₱ bu	1 00@
" Southern, ₱ 100	2 00@ 3 00
Cabbages, So., ₱ bbl	75@ 1 50
Cress, hothouse, ₱ doz	30@
" native, ₱ doz	30@
Chives, ₱ doz	75@
Dandelions, ₱ bu	40@
Egg Plant, So., ₱ case	2 00@ 3 00
Horseradish, ₱ lb	12½@
Herbs, ₱ doz	35@
Lettuce, hothouse, ₱ doz	35@
Lettuce, hotbed, native, ₱ doz	25@
Leeks, ₱ doz	1 00@
Mushrooms, ₱ lb	50@
Mint, ₱ doz	1 00@
Onions, native and N. Y. yellow, ₱ bu	1 25@
Parsley, ₱ bu	2 00@
Parsnips, ₱ box	1 00@ 1 25
Peppers, Southern, per carrier	1 00@ 2 00
Peas, Southern, ₱ crate	75@ 1 75
Radishes, hothouse, per doz	25@
Rhubarb, native, ₱ lb	2@
Spinach, R. I., ₱ bu	40@
Salsify, ₱ doz	1 00@
Squash, Hubbard, ₱ ton	25 00@30 00
String beans, So., ₱ bskt	75@ 1 50
Tomatoes, hothouse, ₱ lb	20@
Tomatoes, Fla., ₱ carrier	1 50@ 2 25
Turnips, yellow, ₱ bbl	1 00@ 1 25

Dried Apples.

Evaporated, fancy	7@8
Evaporated, choice	[illegible]
Evaporated, fair to prime	[illegible]
Sun-dried, as to quality	[illegible]

Hides and Pelts.

Steers and cows, all weights	[illegible]
Hides, south, light green salted	[illegible]
" " dry flint	[illegible]
" buff, in west	9@11
Calfskins, 5 to 12 lbs each	1 [illegible]
" over weights, each	1 [illegible]
Deacon and dairy skins	[illegible]

Beans.

Pea, choice	1 [illegible]
Pea, screened	1 [illegible]@1 65
Pea, seconds	1 [illegible]@1 60
Pea, foreign	1 [illegible]@1 70
Mediums, choice hand-picked	1 [illegible]
Mediums, screened	1 [illegible]@1 75
Yellow eyes, extra	2 [illegible]@2 10
Yellow eyes, seconds	1 [illegible]@1 90
Red Kidney	2 75@2 85

Hay and Straw.

Hay, choice, ₱ ton	16 00@[illegible]
" No 1, ₱ ton	15 [illegible]
" " 2 "	13 [illegible]
" " 3 "	12 [illegible]
" fine choice	11 [illegible]
" clover, mixed, ₱ ton	12 [illegible]
" clover, ₱ ton	11 [illegible]
" swale, ₱ ton	9 [illegible]
Straw, prime rye	17 [illegible]
Straw, oat, per ton	10 [illegible]
Straw, tangled rye	11 [illegible]

FLOUR AND GRAIN

Flour.—The market is quiet, slightly higher.
Spring patents, $5 20@6 25.
Winter patents, $5 25@5 40.
Winter, clear and straight, $5 10@5 60.

Corn Meal.—$1 10@1 12 ₱ bag, and $2 55 ₱ bbl; granulated, $2 90 ₱ bbl.

Graham Flour.—Quoted at $3 50@4 70 ₱ bbl.

Oat Meal.—Quiet at $3 25@4 20 ₱ bbl. for rolled and $4 40@4 75 for cut and ground.

Rye Flour.—The market is firm at $3 80@4 75 ₱ bbl.

Corn.—Supply moderate
Steamer, yellow, 58½c.
No. 3, yellow, 58½c.

Oats.—Supply ample, prices firm
No. 1 clipped white, 39c.
No. 2 clipped, white, 38½c.
No. 3 clipped, white, 38c.
Fancy oats, 40c.

Millfeed.—Market steady.
Winter wheat bran, sacks, $19 00@19 50.
Winter wheat middlings, sacks, $18 00@22 00.
Spring wheat bran, sacks, $18 00@18 50.
Mixed feed, $19 50@21 50.
Cottonseed meal for shipment, $26 50.
Linseed meal, $29 00.

Barley.—Feed barley, 51@52c.

Rye.—No. 2, 90@91c ₱ bushel.

THE WOOL MARKET

Unwashed fleece, fine, Michigan	20@22
" " " Ohio	23@25
" " ½-blood Mich	28@30
" " ⅜-blood Mich	29@31
" " ⅜-blood Ohio	30@37
" " ¼-blood "	30@37
Fine delaine, Ohio	30@37
" " Ohio X, 1 and 2	32@37
Pulled wools, scoured	40@65
American mohair	30@36

SWINE PLAGUE.—G. B. W., Middlesex County, Mass.: Your note of April 21, with the newspaper clipping from the Lowell Morning Citizen, was duly received. Dr. Austin Peters, chief of the State Cattle Bureau, has been investigating the cases you mention and makes us the following statement: I have a quarantine on some swine in Billerica, made out by the local inspector of animals there, Mr. William H. Hutchins, the swine being quarantined under the generic name of "hog cholera." There were twenty-eight originally, of which five have died. I made an autopsy on one, which evidently died of pneumonia and pleurisy. There were no bowel lesions in this one, and the disease was evidently more of the nature of what is called "swine plague" than any other contagious disease of swine. Since my visit, two weeks ago last Saturday, I believe four others have died or been killed, leaving twenty-three at the time of the agent's last visit on Monday. It has been customary with the Cattle Bureau, where there was an outbreak of any contagious swine disease to quarantine animals and keep them quarantined until the sick ones either died or recovered, then to remove the quarantine. I do not think that this outbreak is of any more interest than many other similar outbreaks that the Cattle Bureau has to deal with, and is not one which calls for any special comment.

COLLAR AND SADDLE GALLS.—H. Beck, Lewis County, N. Y.: They usually appear in the early spring when horses are first put to work, and before they are thoroughly seasoned. We find them more often on horses that are put to work with heavy discs or plows on unbroken ground. They also occur when the saddle or collar does not fit properly, either being too large or too small. When horses are first taken from the pastures in the spring and put to work they they are what is known as "soft"—not "seasoned"—which causes them to perspire freely. The excessive dandruff causes the perspiration to adhere to the harness, especially to the collar, making a rough surface, which causes irritation, and a sore is the result. It is, therefore, of great importance to keep the collar perfectly clean, rubbing the dandruff and perspiration off with a cloth every night, and then smoothing the surface with a cloth dampened with a little kerosene oil. The accumulation of dandruff is also found on the collar pad on top of the neck, and is responsible for producing most of these sores. Another evil practised by the average plowman is omitting to unharness the horses when they are placed in the stable during the noon hour. Perspiring horses are sure to rub their harness against the stall or posts, and in this way irritate the shoulders and the neck. It therefore pays to remove the harness during the noon hour. It is true this may cause a little extra work, but it will certainly compensate in the long run. If the horse is blistered, it is well to bathe the parts with warm water, and keep the harness and parts clean. If the collar has produced a raw surface, keep it washed with a good antiseptic solution. These wounds are very troublesome on account of their location, and it is therefore necessary to keep the harness and the parts perfectly clean. If this is done a cure can very easily be effected. If the horse must be used before the sore has healed, further injury may largely be avoided by padding the saddle each side of the sore place, thus leaving the sore place untouched by the harness. Fasten the padding with small straps. A piece of common salve plaster over the sore place will help to keep out dirt and assist healing.

HABITS OF THUNDER STORMS.

Thunder storms and the numeral four appear to have some connection. The Weather Bureau finds that the majority of storms in July occur somewhere near four o'clock in the afternoon. It is a matter of common observation that an afternoon storm on the glorious Fourth is not an uncommon happening.

PLANTING TREES IN PENNSYLVANIA.

The State of Pennsylvania is foremost now among the tree-planting and tree-protecting commonwealths, 708,785 acres of land having been secured by the State forestry reservation commission up to date. Philadelphia's city forestry department, it is pleasant to note, has planted five thousand trees this spring in and about the city, and the trees in the city parks and thoroughfares are to be safeguarded by an increased force of patrolling gardeners this season.

CHOOSING THE BOAR.

The choice of the boar is of greatest importance, for it must not be forgotten that the sire is half the herd. In the case of young boars, the age of the animal must always be borne in mind. It is very difficult to judge boars at from three to five months old. When purchasing a boar of this age it is therefore very desirable to see his sire and dam. If, so far as can be judged in his as yet immature state, the young boar possesses the characteristics sought for, and an inspection of his parents shows them to be of the desired type, the probability is all in favor of the animal developing along the same lines.

APPLYING MANURE AND FERTILIZERS.

Tests with barnyard manure and commercial fertilizers for hops have been in progress for seven years on an English experimental farm. At the beginning of a three-year rotation one plat received thirty loads of barnyard manure for the entire period, while a second plat received ten loads each year. A third plat was annually given commercial fertilizers. In 1903 the plat receiving all the barnyard manure in one dressing yielded nearly half a hundredweight more per acre than the plat receiving ten loads each year, and the yield of both of these plats were considerably in advance of the yield obtained with the commercial fertilizers alone.

MORE MEAT AND MILK FOR POULTRY.

Lack of animal food is the weak point with the average poultry ration. The feeder is apt to use scraps of fresh meat as if it were a kind of relish and not as an important part of the feed, as his own ration of beef steak. Results of recent tests at the Geneva (N. Y.), Experiment Station favor the use for the first few weeks of a ration in which sixty per cent. of the flesh-forming food or protein came from animal food. Growth was more rapid, and equal growth made from less food at a lower cost than other rations having twenty, thirty or forty per cent. of animal protein. After the first few weeks, it was found profitable to increase the proportion of grain. These conclusions are in agreement with common sense, as the young of all birds in the wild state feed largely upon insects.

THE GREAT COUNTRY OF THE NORTH.

The resources of Canada are hardly yet appreciated by her nearest neighbors. Figures were recently quoted by a prominent Canadian speaker, Mr. Edgar Judge, showing that the homestead holdings in northwestern Canada since 1896, have increased from 297,760 acres to 2,282,120 acres. "If fifty thousand farmers could raise seventy million bushels of wheat in 1902, in Manitoba, then 250,000 could raise 350,000,000 bushels, enough to supply the total import requirements of Great Britain, besides feeding the people of Canada." The speaker asserted that the freight on wheat shipped from Ft. William, Canada, to London, England, was less than that on shipments from English midlands, only one hundred miles from London. He concluded that the possibilities of Canada as a grower and exporter of fruit products were greater than those either of Russia or the United States.

IMPROVING FOREST PRODUCTS.

One fact of especial significance noted in the recent Government forestry report is that at the auction sale of timber sold under the Morris bill from the Chippewa reserve in Minnesota, this timber, which was to be cut and removed under regulations prescribed by the Bureau, brought a price reported to be higher than has ever before been obtained for a considerable body of white pine timber, and higher than was paid for similar adjacent timber not subject to the rules of the Forester. Another important fact testifying to the great economic value of the Bureau's operations is that the new method of extracting turpentine has added to our product of naval stores a value of $7,000,000 annually, the product having been increased about forty per cent. while the working life of the trees is indefinitely prolonged. This addition to our national production alone would maintain the Bureau for several years, and it was obtained at a cost of but $14,000.

TESTING CATTLE FEEDS.

The changes made in the feeding-stuff law by the New York State legislature of 1904 are noted in a recent bulletin by Professors Jordan and Fuller, and a report given of the analyses of 263 samples, representing 203 brands of cottonseed meal, linseed meal, old and new process, dried distillers' grains, brewers' grains, malt sprouts, gluten meal and feed, germ oil meal, germaline, hominy feed, wheat bran and middlings, oats and oat byproducts, compounded feeds, including cereal breakfast food byproducts, proprietary feeds and similar goods, barley feed and meal, beet pulp, mixed poultry rations, scratching food, poultry bone, meat meal, beef scrap, blood meal and similar products. At least fifty-two of the samples showed a larger deficit of protein than was regarded by the author as reasonable. Eighteen of these samples deficient in protein were compounded and proprietary feeds, nine linseed meal, and the remainder cottonseed meal, dried distillers' grains, gluten feed, hominy feed, and poultry feeds in about equal proportion. One of the samples of cottonseed meal was evidently cottonseed meal mixed with ground hulls.

The New Hampshire Granges.

After a short illness of pneumonia, at the age of fifty-three years, Gilbert A. Marshall, Lancaster, forever laid down his implements of labor and the emblem of his high office, April 24, and his town loses an honored and loyal citizen, Lancaster grange a beloved and faithful member and past master, the State grange an able and popular overseer, his surviving widow a true and affectionate husband and his four daughters and four younger sons a loving and kind father. The overflowing church, the long procession April 26, were evidences of the esteem in which he was held. The relatives, the nearby granges and the State grange made floral tributes, that of the latter contained a rose for each of the 284 granges in the State. Several State officers were present at the funeral. Brother Marshall had been a member of the school board nine years, selectman and representative.

The master, past master, overseer and secretary conducted the exercises at Gentlemen's Night in Progressive of Deerfield, when a member was tried before a jury for stealing the Town Hall. Applications were received and a choice variety of potatoes was distributed, and the product will be a prize contest Sept. 15, when "Potato Night" will be observed.

Several officers drove thirty miles to reach the Pomona meeting of Cheshire County at Hinsdale. There was interest in the exercises and unanimity in the result of the forenoon discussion that "A Farm is More Valuable for Having a Grange in the Section." At the afternoon session—"Does the Higher Education of Women Result in Happier Homes?"—was the topic for debate.

The lady members of Joe English of New Boston, gave a royal return competitive entertainment, April 28, that contained songs by Ruth Todd, Eva Shedd and Jennie Bartlett, a reading by Emma Todd, and a story of "Why the Sea is Salt," by Blanche Dodge. They personated street venders in "The Peddler's Parade," and vociferously proclaimed and freely dispensed their wares. The brothers acknowledge their defeat and will provide a supper.

Blackwater, Andover, members on April 27, were poverty stricken in raiment but not in manner. Mrs. Winnie Whitney and the Rev. N. G. Ives were awarded the first prize for the worst-looking apparel and there were many close seconds. High-colored patches on the sisters' dresses were exempt, but all other articles of finery subjected the wearers to penny fines. After the poverty party, Sister Sawtelle gave a reading, Agnes Fenton a recitation and Grace Sweatt a very entertaining grange paper. The next programme will be provided by the members from "A" to "F." GEORGE R. DRAKE.

Manchester, N. H.

Prodding the Express Service.

Produce interests in Boston have been finding a great deal of fault with the express service, particularly the Adams, claiming that vegetables and produce are received at all hours of the day and in very bad condition. On complaint being made to the Boston agents it was claimed that the blame rested with the Southern connection, particularly the Southern Express Company, but the produce men insist that the Adams Company itself is careless in handling produce.

It appears that only a small part of the income of the company is derived from handling goods of this class, and they have not devoted the attention to its care and prompt delivery such as has been exercised by some of the companies who make a specialty of handling fruit and farm produce and value it as a large source of income. Boston produce handlers propose to push the matter through and see what can be done to improve the situation.

FARMERS' WANTS
ONE CENT A WORD

Farmers' Want Department is established to allow the sale and exchange of Stock, Seeds, Fruits, etc., also Help or Situation Wanted. There is a charge of one cent per word only, including name, address or initials. No Display. Cash to accompany the order.

SEED POTATOES—"Early Surprise," Maine's earliest Potato; marketed in six weeks, $1.10 large 90c. smaller, per bush. M. A. FOGG, Route 2, Skowhegan, Me.

WANTED—A good live trusty young man. A good horseman, to work on Nursery and Fruit Farm. A good place. GARDNER'S NURSERIES, Cromwell Ct.

HEALTHY, vigorous fruit trees, we grow them in large quantities. Acres of fine berry plants, shade trees, hedge plants, hardy roses, ornamental shrubbery; fine stock, low prices, catalogue. GARDNER'S NURSERIES, Cromwell, Ct.

MORE Chicks die from gapes than all other diseases combined. Rigler's Gape Cure is a sure cure and preventative for this disease. Diarrhoea in chicks is caused from being chilled. No. 13 used at once is a sure cure. 25c each. Booklet free. LEWIS B. RIGLER, Frankford, Pa.

EGGS should be preserved by our absolute sure method at cost of only 1c. per doz., and sold in winter for 40c. This formula was sold by the originators for $2.50. Our price only $1. Secret formula—how to make ice—included free. THE WINN Co., 116 Cambridge A, Mass.

TIMBERED lands, farms, 220-acre farm now keeping 50 cattle, 40x50 feet, 3-story barn and basement, good dwelling, sugar lot, running water, $1500. GEO. H. MOORE, Ludlow, Vt.

WANTED—Position as manager of fancy or utility poultry plant by experienced man. No liquor or tobacco. Reference. POULTRYMAN, Box 124, Station A, Meriden, Ct.

ENORMOUS POTATO. The most productive and profitable variety ever grown. Seed $1.25 per bu. Discount on quantity. JOHN E. GALE, Guilford, Vt.

OHIO IMP. CHESTER PIGS of finest breeding. Sows and boars registered, $8 each. E. D. PAGE, Route 4, Bangor, Me.

PEACH TREES—No. 1 at 3 cents, medium size at 2½ cents and No. 2 at 1½ cents each. Trees kept dormant until after May 15. Circular free. R. S. JOHNSTON, Box —, Stockley, Del.

PICTURES for wedding gifts. Make your suggestion, whether head or landscape preferred and amount you desire to spend. We can select, frame correctly in latest style and ship by express. Photographs, water-colors. Prints all prices; $2.00 and upward. Always on hand. MELVIN W. KENNEY, The Picture Shop, 65 Bromfield Street, Boston, Mass.

SEED POTATOES—20 varieties, smooth, clean, handsome and true to name. 75 cts per bushel, $2 per barrel. E. D. PAGE, Route 4, Bangor, Me.

WEDDING announcements and invitations, correct style, finest quality. Prices quoted. MELVIN W. KENNEY, The Picture Shop, 65 Bromfield Street, Boston, Mass.

WE furnish good situations in Christian families at good wages at all kinds of housework. Write to SALVATION ARMY EMPLOYMENT DEPARTMENT, 124 W. 14th street, New York City.

EGGS FOR HATCHING—Large brown ones. Single-comb R. I. Red $1 per sitting, none better. Also a few eggs from choice pen of White Wyandottes, same price. E. D. PAGE, Route 4, Bangor, Me.

JACKS FOR SALE—Three hundred Jacks and Jennets for sale. Some special bargains and a choice lot to select from. Twenty-five reasons why it pays to raise mules. Traveling expenses refunded to buyers; free telephone and telegraph at farm. Address BAKER'S JACK FARM, Box E, Lawrence, Ind.

EGGS—Bronze Turkey $4.00 ₱ twelve, $2.00 for six. Pearl Guinea $2.00 ₱ twelve. CLARA MAY, Wilton, N. H.

SPECIAL OFFER—Free seed. As an inducement to test my Long Island cabbage seed I will mail free one package of any variety, Spring, Summer, Fall or Winter—or for 10 cents four samples embracing the four seasons. FRANCIS BRILL, Hempstead (L. I.), N. Y.

SCOTCH AND SCOTCH-TOPPED BULLS AND HEIFERS FOR SALE—Sired by imp. Scotch Mist 157639. D. M. REAM, Somerset, O.

BERKSHIRES—Combination's Best 62081—First in class and champion at 1903 International Live Stock Exposition—four yearlings and four spring boars for sale. All good ones. J. A. LELAND, Woodside Farm, Springfield, Ill.

SPRING BROOK STOCK FARM. Berkshires—A few very choice-bred gilts and boars old enough for service for sale yet. These will be priced to sell as they must go to make room for litters now coming. J. M. HODSON, Manager, Montpelier, O.

WANTED IMMEDIATELY—A first-class dairyman and buttermaker, one that can take full charge of sixty-five-cow dairy, who can give perfect satisfaction to customers and owner. Address D. J. McDONALD, Aurora, Ill.

A GOOD CHEESE FACTORY or creamery for sale at Edmond, Okla., 15 miles from Oklahoma City; capacity 1000 lbs. of milk daily. For particulars write S. F. WEISER, Lock Box 462, Edmond, Okla.

REGISTERED CATTLE WANTED—Will exchange good Iowa and Illinois farm. BOX 81, Independence, Ia.

WHITE PLYMOUTH ROCKS—Have a few choice cockerels for sale: also eggs, $1.50 for 15. MRS. HIRAM HOWELL, R. No. 1, Winona, Minn.

BERKSHIRES—First premium herd boars, from one to two years old. No fancy prices asked. S. J. WHITMORE, Horton, Mich.

LARGE ENGLISH YORKSHIRES. The largest herd of the popular breed in America. Over 400 hogs to select from. During the last four years we have shown at the largest fairs in Canada. Out of 16 first prizes given our herd won 98, all silver medals and herd prizes. There is no breed of hogs in existence that make better mothers and can raise more pigs at a litter. If you want to make money in the hog business try the Large English Yorkshire. Prices reasonable. D. C. FLATT & SON, Millgrove, Ont.

YORKSHIRES—Sired by S. H. Colston Eclipse grand champion at St. Louis Exposition. D. KILMER, Elkhart, Ind.

FULL-BLOODED COACH HORSES—Imported from Germany; pedigrees furnished. Address DE BERG & REDENIUS, Dike, Ia.

EGGS—$1 per 15, $5 per 100. Single-combed Brown Leghorns and Black Minorcas, kept on separate farm. ED M. LASATER, Norris City, Ill.

PRIZE-WINNING S. C. Brown Leghorns.—Best laying hen there is. Eggs, 15, $1; 30, $1.75; 50, $2.50; 100, $4. A. KLEIN, R. 36, Campbellsport, Wis.

TWO Young Black Percheron stallions for sale. Beaucourt descent; good ones; will sell reasonable. Address ED HELLER, Thorp, Wis.

A FINE four-year-old Clydesdale stallion for sale cheap, considering quality. I will price him so to will sell. P. A. MAUTZ, Pana, Ill.

JOHN F. WEAVER, Route 16, Pewaukee, Wis. Berkshire pigs. Plymouth Rock eggs, $1 per 15. Good strain.

CHOICE Light Brahma Eggs, for hatching, $1 for 15, 30 for $1.75. W. F. BUNNELL, Route, 2, Augusta, Ill.

WANTED Man to stock and manage 2 500-acre farm, fenced, buildings, water, etc., located midway between St. Paul and Duluth. 1,000 tons of bluejoint hay available. Will rent or take share of profits. J. W. REYNOLDS, Duluth, Minn.

FOR SALE—Buff Plymouth Rock cockerels, Oakhurst strain, immense birds; also White Wyandotte cockerels and pullets fit for showing. Cheap. MISS M. E. FULLER, Box 712, Glen Ellyn, Ill.

EARLY HEREFORDS.

Herd headed by General Grove 127741, by Corrector. Cows by Christopher, Java, Imp. Marchon and other noted sires. Young stock for sale. J. J. EARLY, Baring, Knox County, Mo.

Commonwealth of Massachusetts.

MIDDLESEX, SS.

PROBATE COURT.

To the heirs-at-law, next of kin, and all other persons interested in the estate of JOHN P. CARD, late of Eliot, in the County of York and State of Maine deceased,

WHEREAS, a petition has been presented to said Court by Warren A. Card with certain papers purporting to be copies of the last will and testament of said deceased, and of the probate thereof in said State of Maine duly authenticated, representing that at the time of his death, said deceased had estate in said County of Middlesex, on which said will may operate, and praying that the copy of said will may be filed and recorded in the Registry of Probate of said County of Middlesex, and letters testamentary thereon granted to him.

You are hereby cited to appear at a Probate Court, to be held at Lowell, in said County of Middlesex, on the sixteenth day of May, A. D. 1905, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And said petitioner is hereby directed to give public notice thereof by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the first publication to be thirty days, at least, before said Court.

Witness, CHARLES J. MCINTIRE, Esquire, First Judge of said Court, this twelfth day of April, in the year one thousand nine hundred and five. W. E. ROGERS, Register.

Commonwealth of Massachusetts.

MIDDLESEX, SS.

PROBATE COURT.

To the heirs-at-law, next of kin, and all other persons interested in the estate of MARY E. KEAY, late of Malden, in said County, deceased.

WHEREAS, a certain instrument purporting to be the last will and testament of said deceased, has been presented to said Court, for Probate, by Lottie J. Keay, who prays that letters testamentary may be issued to her, the executrix therein named, without giving a surety on her official bond.

You are hereby cited to appear at a Probate Court, to be held at Lowell, in said County of Middlesex, on the sixteenth day of May, A. D. 1905, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And said petitioner is hereby directed to give public notice, thereof, by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court, and by mailing postpaid, or delivering a copy of this citation to all known persons interested in the estate, seven days, at least, before said Court.

Witness, CHARLES J. MCINTIRE, Esquire, First Judge of said Court, this twelfth day of April, in the year one thousand nine hundred and five. W. E. ROGERS, Register.

Commonwealth of Massachusetts.

MIDDLESEX, SS.

PROBATE COURT.

To the heirs-at-law, next of kin, and all other persons interested in the estate of ALICE MAHER, late of Cambridge, in said County deceased.

WHEREAS, a certain instrument purporting to be the last will and testament of said deceased has been presented to said Court, for Probate, by Maria Holden, who prays that letters testamentary may be issued to her, the executrix therein named, without giving a surety on her official bond.

You are hereby cited to appear at a Probate Court, to be held at Cambridge, in said County of Middlesex, on the sixth day of June, A. D. 1905, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And said petitioner is hereby directed to give public notice thereof by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court, and by mailing, postpaid, or delivering a copy of this citation to all known persons interested in the estate thirty days, at least, before said Court.

Witness, CHARLES J. MCINTIRE, Esquire, First Judge of said Court, this twenty-first day of April, in the year one thousand nine hundred and five. W. E. ROGERS, Register.

Commonwealth of Massachusetts.

MIDDLESEX, SS.

PROBATE COURT.

To the heirs-at-law, next of kin and all other persons interested in the estate of GEORGE RICE, late of Framingham, in said County deceased.

WHEREAS, a certain instrument purporting to be the last will and testament of said deceased, has been presented to said Court, for Probate, by Almira E. Rice, who prays that letters testamentary may be issued to her, the executrix therein named, without giving a surety on her official bond.

You are hereby cited to appear at a Probate Court, to be held at Cambridge, in said County of Middlesex, on the twenty-third day of May, A. D. 1905, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And said petitioner is hereby directed to give public notice thereof, by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court, and by mailing, postpaid, or delivering a copy of this citation to all known persons interested in the estate, seven days, at least, before said Court.

Witness, CHARLES J. MCINTIRE, Esquire, First Judge of said Court, this twenty-eighth day of April, in the year one thousand nine hundred and five. W. E. ROGERS, Register.

MONEY IN EGGS—S. C. B. Leghorns. My method and farm range has developed layers with vigor. 10 eggs produce layers. One-third fancier's price and better layers. $1 per 15, $2 per 50, $3 per 100, $5 per 200, $8.75 per 300. J. E. McCARTHY, R. 3, Mendota, Ill.

Our Homes.

The Workbox.

CHILD'S SWEATER.
(5 to 6 years.)

Four skeins white Bear Brand Spanish yarn. One pair bone needles No. 1, 1 pair steel needles No. 13.

Cast 110 stitches on steel needles.

1st row—Two plain, purl 2, alternately to end of row, turn.

2nd row—Purl 2, 2 plain, alternately to end of row, turn.

Repeat these two rows alternately until the band is 2 inches deep. Change to bone needles and knit pattern as follows:

1st row—(*)Purl 2, 2 plain, purl 2, 1 plain, purl 1, 1 plain, purl 1, 1 plain, purl 1, 1 plain. Repeat from (*) to end of row ending with purl 2, 2 plain, purl 2.

2d row—(*) Two plain, purl 2, 2 plain, purl 1, 1 plain, purl 1, 1 plain, purl 1, 1 plain, purl 1. Repeat from (*) to end of row, ending with 2 plain, purl 2, 2 plain. Repeat these two rows alternately until the back measures 15 inches. Leave 32 stitches each end for shoulders and bind off the intervening stitches for the neck.

Rib 1 and 1 for six rows at each shoulder and bind off.

Front—Repeat the back until you have 15 inches. Leave 32 stitches each end for shoulders and bind off intervening stitches for the neck. Knit each shoulder piece according to pattern for 2 rows.

3rd row—Knit 5 stitches according to pattern; bind off 3, 6 plain and repeat from (*) twice more or 3 times in all.

4th row—Knit according to pattern, casting on 3 stitches where they were bound off in preceding row. This makes 3 buttonholes.

Knit 2 rows according to pattern and bind off.

Sleeves—Cast 110 stitches on bone needles and knit in same rib as sweater for 12 inches.

For the Cuff—With steel needles, on right side of sleeve (narrow) 4 times, (*) knit 3 together (narrow) 5 times. Repeat from (*) 6 times more, or 7 times in all; (*) knit 3 together (narrow) 4 times. You now have 51 stitches on the needle, increase 1 stitch and knit in ribs of 2 plain and purl 2 to a depth of 3 inches and bind off.

Sew up sleeves and underarm seam, letting the front lap one-half inch over the back at top of shoulder and sew in sleeves, putting seam to seam.

Collar—On front pick up 48 stitches and knit in ribs of 2 plain, purl 2, for 3 rows.

4th row—Knit a buttonhole each end as follows: knit 2, bind off 3, rib to within 5 stitches of the end, bind off 3, purl 2.

5th row—Cast on 3 stitches where the 3 were bound off in preceding row. Rib 6 rows. Make a buttonhole each end. Rib 6 rows. Make a buttonhole each end. Rib 12 rows.

Make a buttonhole each end. Rib 1 row and bind off.

Collar and back, pick up 48 stitches and knit in ribs of 2 plain and purl 2 for 33 rows. Make a buttonhole each end. Rib 1 row and bind off.

Sew 3 buttons on top of each shoulder and 3 on each side of collar; turn back front part of collar and button on top button, then turn back the other half of collar and button on same button.

EVA M. NILES.

Flatirons.

The flatirons must always be perfectly clean, and it is best to scour them each time they are used; by doing it thus frequently they are kept clean with very little work, while if negleted they are constantly doing poor work, soiling the clean clothes, and a long scouring when they are cleaned. After they are washed and scoured each week, place on the stove to dry thoroughly and then slip each one into a little bag made with drawstrings for the purpose, or, at least, slip each one into an empty paper bag to keep clean from dust till they are used again. A rag dipped in kerosene and salt is excellent for smoothing the bottom of an iron; or sprinkle some salt between layers of waxed paper like that used for lining cracker boxes, which should be saved for the purpose.

A Cure for Colds.

Here is a cure for colds of any kind. It has been tested repeatedly and has never failed, and as I used to catch cold, which resulted in a bad attack of bronchitis, I can speak from experience. In cases of pneumonia it will not fail to cure if taken in time. Make a ball of cotton batting about the size of a small marble, saturate it well with alchohol, then drop on to it six drops of chloreform; cover it lightly with a thin piece of cotton batting, hold to the mouth, and inhale the fumes, inflating the lungs well. It will open and expand every lung cell instantly.—Woman's Home Companion for May.

The Linen of Ireland.

T. J. Macmahon, who was the commissioner of the Irish Linen Industries Association at the St Louis Exposition, says: "I have often been asked during visits to America if the time would ever come when this country would grow its own flax, spin the yarn and weave and grass bleach the lawn and damasks within the borders of its own domain. It is mainly a question of climate, soil, atmosphere and water, and up to this time these have not been found in conjunction so perfectly adapted to the purpose of linen making as in Ulster. Ireland is located in the drift waters of the Gulf Stream, which tends to modify the climate to a degree of average temperature. The soil of Ulster abounds in the salts and other mineral substances which are essential to the growth of a long, slender stem containing the flax fibre.

"The stalks are gathered into bundles and immersed for about four weeks in stagnant water. They are then spread upon the lea, where they must dry slowly. This completes the disintegrating process, and the woody covering of the stalk is easily removed, releasing the long, slender fibre from which linen is made. This process is a unique feature of the linen industry. No other fibre plant is so treated, and no substitute for the retting process has ever been discovered.

"The atmosphere, moist, mild and constant, offers the best natural surroundings in which to spin the finest flax without danger of injuring the delicate fibre of the plant. The bleaching process consists of exposing the long webs of cloth to the alternate showers and the sun on the lawn fields. In six to eight weeks the natural process bleaches out the natural brown color of the fabric, leaving a rich, creamy white, the perfection of Irish damask.

"There is a tiny field of flax now growing on an experimental farm of the United States under the direction of Professor Wheeler. It gives a faint idea of what a countryside looks like under the flax crop. Mr. Wheeler has located this little section in a region representing Wisconsin and Minnesota. I believe that the State of Washington, where the natural conditions fairly correspond to those in Ireland, is the ideal State in the Union where the culture of flax and the making of linen may be carried on.

"The linen industry of Ulster gives actual employment to over two hundred thousand persons, in addition to those employed in growing the flax, and the annual value of the finished product is $65,000,000, almost half of which is sold to the people of the United States. The American civil war, which shut off the supply of cotton from the English mills and forced the adoption of linen cloth as a substitute for cotton fabrics, gave a stimulus to the Irish linen trade which has never been lost.

"That half of our product finds ready market in the United States is cardinal proof of the high standard of comfort and luxury which obtains in the American family. When America is buying its full share of our linen it serves to enhance the price of the other half, distributed through the British Isles and other parts of the world. It is needless to say that American prosperity at present is demanding this full share as its part of the Irish trade. When the United States is prosperous we are correspondingly so in the North of Ireland, as a rule."

Ventilation.

Housekeepers are, as a rule, much more sensible in regard to fresh night air than they used to be. Especially is it necessary in winter to air out the house as often as possible. There is always more or less gas in the air of furnace-heated rooms, as well as in those heated by stoves. People who live in overheated houses in winter are much more liable to pneumonia and severe colds than those who endure rather chilly rooms where the air is pure. Every room in the house should be thoroughly aired at least once every day, and then heated up again and protected from draughts. So many people shiver and shake when the living-room windows are thrown wide open for a few moments. They seem to dread pure cold air. A robust person ought not to feel in this way, and he who has this innate dread cannot be in the best of health. Where a small stove is used to heat a room it is a good plan to keep a pan of water on top of it, especially if it is an oil stove. It is said that the steam escaping from the water will help to keep the air wholesome.

An authority says: "Stoves in a room, unless it is constantly supplied with fresh air from without, dry its air to an unwholesome extent. If no appliance for providing this supply exists in a room, it can usually be got without a draught by fixing a board about four inches wide under the lower sash and shutting the window down on it. Fresh air then comes in by the opening between the sashes, and in a current directed upward, which gradually diffuses itself over the room without being felt as a draught at any one point."

It is difficult for a robust person to sleep with any degree of comfort without a window open considerably even in winter. Closed bedroom windows are generally to blame for bad dreams, headache and all manner of ills. Draughts should, of course, be avoided, and there should be plenty of warm bed coverings. Transoms over bedroom doors are excellent, though not always appreciated. They should be kept open at night to let in (in connection with windows) a mild current of fresh air.—New York Tribune.

How Much to Eat.

That we eat a great deal too much is an old story. Very few people seriously dispute the abstract proposition, and yet not many go systematically to work to reduce their consumption of food. Such incidents as the stock-yards strike, causing a rise in the price of meat, and the fear that a still greater increase may be in prospect, lend additional interest to the inquiry, and a few turn to vegetable diet, but expect to eat as much as before. Most people do not like the idea of restricting the pleasures of the palate from motives of economy, and will only do so in case of absolute necessity. Still the advocates of less food continue their researches, and they claim to have discovered that not only can we subsist on a half or a third of the food we now consume, and get increased health and strength from the smaller quantity, but that we may thereby increase the pleasure of eating. As the result of recent experiments made with half the usual amount of food, or less, it is claimed that efficiency was increased from one hundred to two hundred per cent. A champion wrestler began with forty-five hundred units of efficiency and increased them to eight thousand. In general, the smaller consumption of food was attended with keenness, elasticity, mental alertness and a surplusage of energy always at command, a capacity to indulge a mental or physical exercise without fear of fatigue. And, what will attract more attention from many, it is stated that there was no diminution of gastronomic pleasure, but, on the contrary, an enjoyment of eating never before experienced.

The main point in this pleasing programme is to eat less, but it is also essential to eat with deliberation and to see that mastication is thorough. No abstinence from favorite dishes is required, but rather the reverse, as the rule is to eat what the appetite craves. This done, with complete mastication and a reduction of one-half or two-thirds in the quantity consumed, the result is happiness. The general adoption of these ideas would have a serious effect on the prices of provisions, but the danger is not yet imminent.—Louisville Courier Journal.

Ways of Serving Ice-Cream.

New ways of serving ice-cream are discovered every year. There are now ice-cream sandwiches, ice-cream snowballs, baked ice-cream, ice-cream croquettes, and an endless number of dishes which, in spite of their queer-sounding names, are very delicious, says the New York Tribune.

To make ice-cream croquettes freeze ice-cream until quite hard. Scoop out large spoonfuls and mould them into the form of croquettes. Roll each croquette in powdered macaroons or finely chopped hickory nuts until nicely coated and having the appearance of a genuine croquette. Serve immediately on a pretty platter, garnished with dainty green leaves. It is a good dish at young people's parties.

Ice-cream sandwiches are made by cutting delicate sponge cake into thin slices and then spreading a thick layer of ice-cream between two of them.

Ice-cream snowballs are made by scooping out, in round shapes, large spoonfuls of firm vanilla cream from a well packed freezer. Roll each ball in freshly grated cocoanut until it is thoroughly covered and the picture of a genuine snowball. Pile these snowballs on a pretty platter and serve with angel cake.

Baked ice cream, or glace meringue, as the French call this popular dish, is made by covering a solid cake of ice cream completely with a thick meringue. It should be placed on a dish with a standard, so that the bottom of the dish does not touch the oven shelf. This keeps the heat from getting through the china to the cream. The egg whites, when they completely cover the cream, are a perfect non-conductor. In the oven the cream should remain as cold as ice, while the meringue becomes a beautiful golden color. This cream is always popular with young folks, because of its oddity.

Volumes could be written about ice-cream and the myriad ways of serving it. There are maple sugar ice-cream, caramel coffee, tea and chocolate creams, besides apple, peach and all manner of fruit flavors. There are also many excellent nut creams and tutti frutti.

Plum pudding glace is the recipe of a famous chef. It is an ice-cream which has all the appearance of a royal plum pudding. To make it a dark chocolate cream is filled with raisins, pieces of citron, candied cherries, apricots, etc. The ice-cream is then packed in a pudding mould surrounded by ice, and when formed it is served with a rich sauce prepared with brandy and whipped cream. To prepare the sauce mix two egg yolks with one ounce of powdered sugar. Place on a slow stove and stir it briskly, adding gradually one gill of old English brandy. Heat it well, but do not let it boil. Take it from the stove and stir it continually for twelve menutes. Then fold in a pint of well whipped cream. Before adding the raisins and other fruit to the ice-cream let them cook for ten or twelve hours in sherry and mix them thoroughly together. The fruit should also be added the last minute—after the cream is frozen. All fresh fruits should be soaked first in sherry or liquor of some kind, if they are packed in ice-cream for any length of time. This will not be necessary if they are to be stirred in just before serving.

Plain vanilla cream is often made more elaborate by serving it in combination with a little rich preserve like brandied fruit—a peach or plum being added to each small plate of cream. Some women prefer a simple preserved peach, while others like ginger preserves with ice-cream. In fact, all manner of preserves and fancy fruits as used.

A pretty dish is prepared with lady fingers, a little fresh fruit and ice-cream. Boil a sugar syrup until it "strings." Dip the edges of the lady fingers in this and arrange them around the sides of a cup made of bristol board. Let them rest several hours or until they are stiffly joined together—enough to stand alone. Free each lady finger cup from the bristol board and fill the hollow centres with strawberries or any suitable fresh fruit. The cream should be flavored with the kind of fruit used.

A great many housekeepers have heard of the hot chocolate sauce used to serve with ice-cream, but a maple sugar sauce filled with nuts is not so common. The sugar should be of the best quality and should be melted over the fire in a small quantity of water. When it boils until a little, if dropped in cold water forms a soft ball, it is ready. Serve hot with the cream. —N. Y. Tribune.

Baltimore Women at Market.

It is a recognized fact that the Baltimore society woman goes to market as regularly as she attends church, and in many instances her face is much more familiar where the good things for the inner man are to be found than it is at the place of worship. Although she may have an excellent housekeeper and a retinue of servants, yet milady prefers to personally select the meats and vegetables for the family table. On Tuesday and Friday mornings of each week Lexington market is the Mecca for many women who are members of the monumental city's wealthiest and most aristocratic families, and a long line of carriages such as might be found where a reception was in progress is strung out along Lexington and Eutaw streets.

Richmond market is a little nearer to the fashionable section of the town, and it is here that much of the Saturday buying is done. This market, however, is smaller and in no ways compares with the famous old Lexington, which has long been one of Baltimore's show places. To see the market at its best the visit should be made just before the holidays, when great wreaths of holly and huge bunches of southern mistletoe decorate even the most obscure stand, or in the early spring, when the stalls seem to bend beneath the weight of large pyramids of brilliantly-colored vegetables with their background of Easter lilies.

As early as ten o'clock the woman who the night before has been the hostess of some brilliant function alights from her carriage, usually at the Eutaw-street end of the market, sometimes accompanied by her butler, but more frequently she enters the market-place alone. Going from one stall to another, testing the youth of the poultry, the tenderness of the beef, the firmness of the tomato, and the freshness of the fruit, she brushes shoulders with the wife of the poorest laborers, for this is a market patronized by all classes.

Usually her purchases are sent to the carriage, which is left in charge of a coachman. Here they are placed in a hamper prepared for that purpose, and in a very short time, in case she does not happen to meet a friend, madam drives home with a well-stocked larder. Sometimes the marketing is sent to the butcher, who carefully packs it in a basket, and it is delivered by one of his employees. Should the poultryman's boy be rushed with work, this woman, who is waited on at home like a princess, will not hesitate for a moment to carry a pair of fowls to her carriage.

To many fashionable women marketing is a genuine pleasure, for while thus engaged she meets her friends, and between the "ten-pound roast, please," and "three porterhouse steaks," they discuss the success of a debutante at the bachelors' cotillion on the previous night, or the prospect of a crush for the evening's reception.

Different stalls are frequently a rendezvous, and at a recent reception, as two women came down stairs to leave, one called to the other, as she entered her carriage: "Good night, dear; I'll meet you at ——stall tomorrow at eleven," mentioning the name of a well-known dealer in vegetables. Then, too, the countryman brings his cream and buttermilk to market, and as both these products of the farm are said to be healthful and beautifying, the society queen does not hesitate to refresh herself with a glass of each while looking about for an addition to the family menu.

Another farmer brings home-made ice-cream, and it is quite the proper thing to top off with five cents' worth of this very delicious article, eaten from a very thick glass with an equally thin tin spoon. Lexington market has many interesting features, but perhaps the most unique of all is a young man who manufactures a brand of sausage the name of which is almost a household word in Baltimore. Each day he does his white aprons and weighs well pound after pound of this popular food to the pretty women who gather about his stall, chattering like so many spring birds.

At night this same young man, a musician of rare ability and a picture in evening clothes, directs his own orchestra at the house of his customer, who dances to his music at night and partakes of his sausages for breakfast in the morning. Surely this is an odd combination, for one to be proficient in both art and necessity. Few cities can boast of a better market or more beautiful woman as purchasers, and the stranger who spends an hour or two viewing its sights is always amply repaid.—Leslie's.

Domestic Hints.

STUFFED GREEN PEPPERS.

Cut a small piece off the stem end of the peppers, or cut them in two lengthwise, removing the seeds and partitions. Boil them for five minutes, drain, and fill with three Bermuda onions cooked tender, chopped and mixed with a tablespoonful of minced parsley, a scant cupful of bread-crumbs, a few drops of lemon juice, salt, cayenne, a little celery salt and two tablespoonfuls of mushroom catsup. Bake the stuffed peppers in a shallow pan in a hot oven, basting frequently with melted butter.

BANANA SALAD.

Make a strong lemon jelly, omitting sugar. Mould this in a ring mould, and when quite firm fill the hollow with sliced bananas mixed with a cream mayonnaise. If the jelly is colored with spinach green the salad will be the more attractive.

BAKED HALIBUT.

Purchase three pounds of fish and see that it is cut in two-inch strips. Remove the skin and squeeze the juice of two lemons over the fish and add a good sprinkling of pepper and salt. Allow it to stand thus for an hour, after which dip in melted butter, dredge with flour and bake thirty minutes. When done, dust the top with grated hard-boiled eggs and garnish with parsley. Serve with white sauce.

OLD-TIME BUNS.

Mix to a stiff batter three cups of milk, one of sugar, a yeast cake (or cup of yeast, as it used to be), and the necessary quantity of flour. Mix at noon and allow the batter to rise until night, then add a cupful of sugar, one of currants, one of molasses, a teaspoonful of soda, one of nutmeg, one-half teaspoonful of cinnamon, the same of ground cloves. Mix again to a stiff batter, set to rise over night, make into shapes and when baked wash the tops with raw egg.

JELLIED CUTLETS.

Put the best end of a neck of lamb in a saucepan with an onion, some bay leaves, pepper and salt, see the lid is fixed on tightly, and set over the fire to braise until quite tender. Take out, and when quite cold cut into neat cutlets. Put some gelatine or some isinglass in some stock, and color a nice dark brown, dip the cutlet in this and put on one side until cold. Arrange them in the middle of a dish and put round some chopped lettuce and tomatoes cut in slices on the top.

Hints to Housekeepers.

Perhaps it is not generally known that leftovers from a gelatine dish can be remoulded. The jelly should be warmed just enough to melt, poured into a mould, and placed on ice.

Baking-powder tins should not be recklessly thrown away. They are useful in a number of ways, as for example, moulding small jellies creams, or rice desserts. They make fine little moulds in which to boil or steam individual puddings, and they often come in handy as receptacles.

The value of the onion in the dietary has been made the subject of much doggerel verse. All agree that health and beauty wait on the fragrant vegetable.

"Eat onions in May,
No doctor you'll pay,"

runs one old verse, while another promises a good complexion to the onion eater thus:

"Fresh onions and leek,
New skin in a week."

A few drops of kerosene added to the starch makes ironing easier and lends a gloss to the linen. Flies hate the odor of kerosene, it is said, and if the outside of a screen door be rubbed with the oil, the opening of the door will not be followed by an inrush of the winged pests. There is only one drawback to that expedient. The family do not like the odor of kerosene any better than the flies do.

A new method of blanching almonds is to soak them overnight in cold water. This is said to be an improvement on the usual method of throwing them into boiling water.

Where soiled clothes have to be kept in the bathroom, as in crowded flat-houses this must be, a small barrel painted inside and out, with holes in the side for ventilation, is better than a hamper. That is to say, it is better for the people in the house and just as good for the clothes.

The appearance of meat pie crusts, and in fact almost any pastry, is much improved by brushing with a mixture made by beating the yolk of an egg in two tablespoonfuls of milk. The glazing should be done about ten minutes before the pastry is taken from the oven.

In an old number of a household magazine it was suggested that the cocoa is much improved by being beaten with a Dover egg beater just before removing from the fire. This has been tried lately and approved.

Hot water and soap generally removes grease spots. If fixed by long standing, use either, chloroform, or naphtha. All three of these must be used away from either fire or artificial light.

Fashion Notes.

*** The fashion of matching every part of one's costume is being carried to the extreme limit this season. The hat must match more exactly than ever, and many women buy white straw braid and have it dyed to the desired tone. Milliners will have the straw dyed for their customers if desired. Crin and horsehair braids are easy to color, but some of the straws are very difficult, hence expensive.

*** Linen sailor hats will be popular to wear with linen gowns, and when the gowns are embroidered it is the thing to have a matching embroidery on the hat. Several shops make a specialty of these exacting little requirements, and their charges are so moderate that, unless one is an expert embroiderer, it is better not to attempt them at home. It is one thing to embroider a doily or even a shirtwaist front, and another to decorate a hat or parasol. The amateurish touch is usually very apparent.

*** Black and white millinery is modish, as it almost always is. A fine straw hat in a round shape had for trimming a crush band of black velvet and a pompom of pure white ostrich tips with a large aigrette. The polo turbans are simple enough, but they are so undeniably bizarre that they do not look simple. In order to be worn with any effect the coiffure must be elaborate. The turban to show to advantage must perch among braids and puffs of hair. Worn with a plain coiffure it looks like a pillbox.

*** There are variations of the turban which are not quite so hard to wear. The Lamballe turban has a fluted or ruffled edge, something like a Gorday, only shorter. This gives a foundation for a wreath trimming which relieves the look of startling abruptness characteristic of the polo. A charming mauve turban of this description had the inner brim under the ruffled straw edge filled with a tulle rushing, lighter in color than the turban. The wreath was of yellow pansies—a popular flower just at present—while a single ostrich tip was arranged penache-wise on the side, fastened there by a mauve velvet rosette.

*** All sorts, and one might say all conditions, of flowers are fashionable for millinery purposes. Milliners have never taken great pains to keep the colors of their flowers within the limitations prescribed by nature, but the variations they are indulging in at present are rather startling. Are green and mauve roses really possible? Pink forget-me-nots are not so bad, simply because they suggest any kind of small wild blossoms, but the rose is always the rose and should be kept as nearly natural as possible.

*** The brotelle gown seems to be gaining favor marvellously. It is a very youthful fashion and should never, never be attempted by a stout woman. The stage-peasant appearance is not adapted to modern conditions. The brotelle gown is a boon to mothers of growing girls, especially if there are gowns of her own to be remade for the daughters. If there is material enough for the skirt and the merest scraps left over a pretty gown is altogether possible. The brotelles may be made of fancy trimmings, matching the material in color and general design, and the material itself appears in the shoulder pieces. They alone are enough to connect waist and skirt. A charming dress for a young girl was made of silver gray fancy silk, with a small embroidered figure in darker gray and black. The skirt was made with wide side plaits stitched over the hips. There was a trimming around the skirt of fancy black braid, put on in a pattern. The brotelles were of the braid with a small double ruching of the silk on either edge. For the shoulder caps the silk ruffle became much wider, and was shirred on the lower edge. A wide crush girdle of the silk was fastened with three large black crocheted buttons.

*** Similar to the brotelle gown is the peasant waist and skirt. The skirt is made simply and is always wide and full. The waist is a low-necked round bodice, with straps over the shoulders. This is a very pretty model for a young girl. Purple and white foulard combined with purple velvet made a charming gown worn by an extremely blond young woman. The skirt was box plaited and shirred alternately all around, and hung quite full from the waist. The girdle and shoulder straps were of velvet, the latter of velvet ribbon tied in little bows, where they joined the waist. The guimpe was of deep cream batiste embroidered with dots and eyelet embroidery.

*** There never was a time when the guimpe played such an important part in the fashions, although in old fashion plates of the fifties one sees innumerable examples practically identical with the present styles. At that time bodices were made with heart-shaped and square necks, with guimpes or tuckers of the finest lawns and India muslins covered with needlework. Undersleeves were worn, too, just as at present, and many women treasure among relics of antebellum finery exquisite bits of needlework, yellow with age.

*** There are some excellent piques on the market this spring, much lighter in weight than this fabric has ever been before. These are in great demand, both in the plain and figured varieties. Pique is as good a material as linen for coat and skirt suits, and, indeed, has some points of superiority. It does not crush as easily as linen, and, in the light weights now to be had, is not as warm.

*** The revival of ruffles and frills is a boon to thin women who have sometimes found it difficult to wear summer muslins becomingly. One can have a thin gown covered with ruffles, and be very much in fashion. A graduation party gown of fine nainsook was made with a full skirt trimmed with no fewer than ten narrow ruffles edged with the popular round-meshed Valenciennes, which is only less desirable than the real lace. These ruffles were graduated in width, but none of them were wider than five inches, and were set some distance apart. The waist was low-necked, and had the decollette outlined by a double rouche of lace. Three narrow ruffles trimmed the waist and crossed the full elbow sleeves. There was a girdle with sash ends of white taffeta ribbon, in the sash end of which were twined small white roses. A bunch of natural white roses would naturally be worn on the corsage. Puffs are also for the thin woman. Muslins are very much puffed just now.

*** Among novelties in trimming are rubber-plant and palm leaves. These are made to take the place of quills. To make them the more realistic, little defects are simulated, some leaves showing brown edges or even worm holes. Peacock feathers are also used, although many people affect a superstitious feeling against them. One pretty hat garniture noticed lately was a cluster of plain peacock quills in the characteristic green and blue color brushed over with bronze, the quills tied together with a handsome tail feather. White peacock feathers are new and very pretty. The new hats, especially formal street hats, require many quills, and besides feathers, straw, leather, kid, and beads are utilized.—N. Y. Evening Post.

Poetry.

A QUESTION.

O love of mine, why should the world
Regain the beauty of the past,
As if once more God had unfurled
The splendors first about it cast,
And we remain untouched by Spring,
In every sense and thought of ours,
When soul for us has birds to sing,
And heart for us has fragrant flowers?

WILLIAM BRUNTON.

THE ONLY WAY.

Stop in a street and stare up at a building,
Stare at a mast or a window or roof;
Mark ye how quickly the folk gather to you!
Few have the courage to linger aloof!

And from the incident draw the deduction,
Patent, inspiring, I think, on the whole;
If in the world you would have people with you
Do something, if only to stare at a pole!

—New Orleans Times-Democrat.

MY BOSTON BEAN POT.

What old-time fancies come from far
As I sit brooding o'er this jar,
This old brown jar of pork and beans
Which brings me back to childhood's scenes
No toil those Sabbaths could abide
In that new land, the Pilgrim's pride,
From set of sun on Saturn's night,
Till set of sun closed Sunday's light.

When Night her kindly curtains drew—
The Sabbath preparations through—
And Sabbath stillness settled down
Upon that old New England town,
And wintry waves broke on the shore,
And wintry winds howled round the door.
And shrieked across the harbor bar—
How welcome was that old bean jar.

The homely kitchen, large and low,
With cheerful fireplace aglow,
The old deal table, white as snow,
The settle by the table's side,
The blue delf dishes—mother's pride—
The firelight dancing on the wall,
And then, the welcome supper call,
While on the table, smoking hot,
My mother placed the old bean pot.

The rich aroma of that jar
Comes to me down the years afar;
The sweet brown bread and fragrant steam
Of pork and beans, live in my dream,
And this old man's a boy once more
Upon that bleak New England shore;
Vanished the years that lie between
This present and that pot of beans.

Were gustatory relish dead
'Twould live again in that brown bread
And sated appetite, I wot,
Would quicken round that old bean pot;
But, best of all, my youth's renewed
As o'er that old bean pot I brood;
The gates of childhood stand ajar,
Though closed for years—by that bean jar.

—W. S. Messmer of Texas, in the Boston Globe.

AN ARMFUL OF JOY.

Care is a feather and grief is a bubble—
Armful o' joy in a world full o' trouble!
Bright as if skies
Made the blue of his eyes,
With red lips that know not the meaning of sighs.

He weeps not the future—he knows not the past.
Yet he knows there are loving arms holding him fast;
His pillow of rest
Is a mother's dear breast,
And that's the sweet pillow he's loving the best!

Blue skies and balmiest blossoms above him—
Roses for playmates, and lilies to love him!
Walk, little feet,
In Life's rosiest street,
'Till with roses of heaven these earth roses meet!

—Atlanta Constitution.

A PRAYER FOR SAD PILGRIMS.

Lord God, I have not over-vexed Thine ears
With meek requirements nor with wild, weak tears;
I have not beat upon thy listening gates
To save mine argosies with precious freights;
Nay, surely, my petitions have not stirred
Upon Thy patient lips one weary word.

The trivial thorns that sting my naked feet,
The pool of Marah that I dreamed was sweet,
The golden day I touched, and touching lost,
Lord God, it were not meet that Thou the cost
Of these my sorrows recompense again—
I would not burden Thee with prayers of pain.

Strange, then, my scanty confidence today;
I kneel beside this dreary, dusty way
To ask not where my troublous paths do trend,
Nor when my sorry pilgrimages end;
Grant but such wayside happiness to find,
Lord God, as I discern in mine own kind.

—Emery Pottle, in the May Century.

QUATRAINS.

The Boston girls are cold as ice,
At least, they have that name;
But one always finds them mighty nice
To freeze to, just the same.

Here's to the woman with heart of stone!
But strike her just right and she is thine own.
Be unabashed and do not tire,
For from hearts of flint come sparks of fire.

—Sara Louise Cowan, in N. Y. Tribune.

THE WILFUL KANGAROO.

The little Kangaroo
(If this story is quite true)
Could not be made to bathe him in the river.
He said he never yet
Saw water quite so wet—
The mere suggestion made him shake and shiver!

His mother said "Absurd!
You're a ninny, on my word!
What well-bred jungle creature would act so?
The little Elephants
Are glad to have the chance—
Their bath is just a frolic, as you know.

"The little Barbary Ape
Does not try to escape
When threatened with cold water and the soap;
The Hippo-potamusses
Don't make such awful fusses,
Nor the Jaguar, nor the little Antelope.

"The mild, obedient Yak
Would never answer back,
Nor does the Rhino-cino-roarer-horse;
And the baby Crocodile—
Why, the water makes him smile;
And he takes his daily plunges as of course."

—Ellen F. Talbot, in May St. Nicholas.

Brilliants.

Still shines the light of holy lives
Like star-beams over doubt;
Each sainted memory, Christ-like, drives
Some dark possession out.

—John G. Whittier.

Flatter not folly with an idle faith,
Nor let earth stand upon her own desert;
But show what wisdom in the scriptures saith,
The fruitful hand doth show the fruitful heart;
Believe the word, and thereto bend thy will,
And teach obedience for a blessed skill.

—Nicholas Breton.

God keep us through the common days,
The level stretches, white with dust,
When thought is tired, and hands upraise
Their burdens feebly, since they must.
In days of slowly fretting care,
Then most we need the strength of prayer.

—Margaret E. Sangster.

My crown is in my heart, not on my head,
Nor decked with diamonds and Indian stones,
Nor to be seen: my crown is called content;
A crown it is, that seldom kings enjoy.

—Shakspere: King Henry VI.

Miscellaneous.

Consolation.

Mrs. Jefferson was not more than thirty-five years of age, and she had spent fourteen years of married life in India. She had seen three of her children buried in an unhealthy station, and had been to England once, seven years before, to take two little girls home to be educated. It was on her return voyage from visiting her children that I met her.

She was so much less aggressive than most of the women on board, and demanded so much less attention, that it was restful to a lazy man like myself just to sit quietly by her deck chair share my books and newspapers with her, and enjoy my evening cigar by her side. Mrs. Jefferson did not ect to smoking, she seemed indeed so diffident so humble and unexacting that I found myself wondering what the man must be like who was her husband, and hoping that he was not a selfish brute who sat upon the little woman. She was not communicative, and I found out very little about her during our long chats. Perhaps I am egotistical and talk a good deal about myself when I get a patient listener Be that as it may, I gleaned nothing of Mrs. Jefferson's own history from her, and at last I determined to ask the captain of the ship if he knew anything about her.

"It is odd that you should ask me that," said Captain Hargreaves, "for it was only today that I began to recall Mrs. Jefferson to my recollection. She told me her maiden name this morning, and said that she had traveled out with me once before, and I recollected the circumstances immediately.

"She was going out to India to be married to this man Jefferson, and a very pretty girl she was in those days, though one would hardly guess it now to look at her—one gets accustomed to that sort of thing on board these P. and O. vessels—one year a pretty girl with pink cheeks and her lover's photograph on her cabin table, going out to be married and to be happy ever afterward, and a few years later, the same girl with all the roses washed out of her cheeks, bringing home a little boy or girl to say goodby to them in England, and to go back to some plantation in the hills where perhaps her husband's is the only white face she sees for most days in the year."

"Yet they'll continue to go while the world lasts," said I. "I hope Jefferson was the right sort of a man?"

"So far as I can hear," said Captain Hargreaves, "he is very much the reverse! He got into some trouble over a business affair, and lost a good billet down in Calcutta; then he came into a little money, and bought a tea plantation somewhere in the back of beyond. But he was always something of a bounder, I fancy, and his misfortune, as men of Jefferson's type always call their misdoings, soured him. He took to drink, I believe, and this little woman doesn't have the best of times with him. She has got children at home and has lost several others out in India."

Naturally one avoided the subject of Mr. Jefferson ever afterward when talking to his wife, and I heard nothing about him till the very last day of the voyage.

It was horribly hot weather—quite exhausting for ladies. Mrs. Jefferson had been confined to her cabin for some days with a bad attack of fever and headache. She looked pathetically small and weak when she came on deck again, and curled herself up in my big deck chair which I had prepared with cushions for her, giving me at the same time a look so full of gratitude that it was enough to make any decent man feel ashamed of himself.

The rest of the passengers began to go below, card tables were put away, the principal electric lights were put out, but still Mrs. Jefferson sat in the deck chair, looking small and weak among the pillows, and I took it into my head suddenly that she wanted to say something to me, but that speech was difficult to her, and in a flash I knew intuitively that she had learned the silence which so many women have to learn.

"I want to thank you," she said at last, "for all your goodness to me on this voyage." Her voice was so low and gentle that I had to lean forward to catch exactly what she said, and as I did so she laid her hand in mine. "Perhaps you don't know," she said slowly, "quite what your friendship has been to me."

I stumbled and said something bald and stupid in response, and Mrs. Jefferson went on:

"For seven years I have lived for nothing but this visit home to England. When anything in my life was a little disappointing, I always said to myself, 'I have the children to go back to.' And every week I had their precious, foolish little letters, which told me so little and kept me hungering to see them."

"It must have been awful to leave them again," I said, and in the dark I took again the little hand which had lain in mine.

"They were so fond of me," said Mrs. Jefferson, still in the same halting fashion, like one who speaks an unfamiliar language. "I mean when they were little things. I do not think quite tiny children could ever have been more fond of their mother. And"—she hesitated for a moment, and said, with so much difficulty that it seemed almost like cruelty to allow her to proceed—"I always thought they would remember me, although they were so little." She paused again, and went on: "You mustn't think that I was silly about them, or that I expected too much. . . . I always thought at first they might be a little bit shy of me. . . . But they didn't even know me, and they were certainly disappointed in me. . . . One of them was five years old when I said goodby to her. Now she is a school-girl of thirteen. . . . Her only photograph of me was taken long ago, so it is no wonder that she didn't know me."

I did not fill in the pause by any banal remark.

"They have been brought up in a very prim household," went on the gentle voice, "in which love, I fear, is not a thing that is reckoned with or encouraged. They rather despised me for laughing and crying over them when we met, and—it is only natural, of course—all their little confidences were for the people who brought them up, and all their ways of thinking are their ways, and not mine. One of my little girls, I found, is not a very truthful child, and the other, when I asked her what she would like best to do seemed more content at home."

"But you made friends and got over all that before you left?" I said encouragingly.

"If only I had had a little more time!" said Mrs. Jefferson.

It would have been so much better for her if she could have wept. She locked her thin hands together, and said with a sort of wail in her voice —"If only I had had a little more time!"

After a while she went on quite quietly, and told me that her husband had sent for her to return to him, and she had been obliged to leave the children.

"Of course a man wants his wife in a solitary life like ours," she went on, excusingly. "And so I said goodby to them. . . . I don't think any one was very sorry when I came away."

The decks were quite deserted now. Tomorrow they would be alive with passengers preparing to leave the ship, and friends meeting friends from Bombay, and ship's officials, and hurrying agents and perspiring stewards. Tonight they were quite deserted save for Mrs. Jefferson and me.

"We live quite an isolated life at the tea garden," she said presently, "but I left a little dog there of which I am very fond. . . . I am afraid you will think me very morbid and imaginative," she added in her deprecatory little way, "but I think I have based all my possibilities of bearing things upon the question of whether or not my dog knows me again and is glad to see me."

I still held Mrs. Jefferson's hand in mine, and now I raised it to my lips and kissed it. "You will let me know," I said huskily, and found to my surprise that I could not say more.

"Yes, I will let you know," said Mrs. Jefferson.

And one day I got a little note from her which said: "The dog knew me," and that was all.—S. Macnaughtan, in Temple Bar.

Hope evermore and believe, O man, for o'er as thy thought
So are the things that thou see'st; e'en as thy hope and belief.
Cowardly art, thou and timid? they rise to provoke thee against them;
Hast thou courage? enough, see them exulting to yield. —Arthur Hugh Clough.

Youth's Department.

Shark Bait.

It appears that the Hawaiian chiefs of some years ago were much addicted to the use of human flesh as bait for sharks. It came cheaper than pig, was equally acceptable to the shark and gave the chief an opportunity to kill any one whom he disliked. The victim was cut up and left to decompose for two or three days in a receptacle. Kamehamcha I. was a great shark hunter, and kept those of his victims who were intended for bait penned up near the great temple of Mookini.

Mrs. Beckley gives a particularly interesting account of another method of capturing the huge niuhi, or man-eating shark, followed by the natives. They first of all captured a large number of the small common shark, saved the livers with a portion of the flesh, wrapped them in ki leaves and baked them underground. From fifty to a hundred canoes were loaded with the baked meat and large quantities of the pounded roots of awa, mixed with a little water and contained in large gourds. The fleet would sail many miles out to sea in the direction in which the niuhi is known to appear.

Arrived at a comparatively shallow place, the canoe containing the head fisherman and the priest and sorcerer, who was supposed to be indispensable, would cast anchor; meat and baked liver would be thrown overboard, a few bundles at a time, to attract sharks. After a few days the grease and scent of cooked meats would spread through the water many miles in radius. The niuhi would almost always make its appearance after the third or fourth day, when bundles of the baked meat were thrown to it as fast as it could swallow them. After a while it would become comparatively tame, and would come up to one or other of the canoes to be fed. Bundles of the liver with the pounded awa would then be given it, and it would become not only satiated, but also stupefied with awa.

A noose was then slipped over its head, and the fleet raised anchor and set sail for home, the shark following, a willing prisoner, and the occupants of the nearest canoes being careful to feed it upon the same mixture from time to time. It was led right into shallow water until it was stranded, and then killed. Every part of the bones and skin were supposed to confer an unflinching bravery upon the possessor, and the actual captor, that is, the one who slipped the noose over the niuhi's head, would also ever after be always victorious.—Forest and Stream.

Tests of Animal Speed.

An European engineer, Joseph Olshausen, began about fifteen years ago to measure the speeds of all creatures that he could study, and as a result he has collected a remarkable array of facts, each one based on absolute experiment, to show just how fast or slow hundreds of animals are.

He has found that man can attain remarkable speeds, but only by the use of artificial aids. A good pedestrian's speed over good roads, he says, is a sixteenth of a mile in twelve seconds. The German soldier covers a little more than three miles an hour during an ordinary march that does not last too long. But after an eight days march the distance covered in a whole day often is only eighteen and three-quarter miles. In quickstep, however, the same soldiers have covered five miles an hour.

In athletes, the best speed recorded by the investigation was the initial velocity acquired by a broad jumper, who took the jump with a speed that carried him through the air at the rate of 303 inches in a second.

The maximum speed acquired by the average person in swimming comfortably is thirty-nine inches a second, while oarsmen in an eight-oared barge acquired a speed of 197 inches in a second.

Skaters average from eight to ten yards a second, while runners on skees have made as much as twenty-four yards in the same time, and the jumper on skees has developed almost forty yards' velocity in a second. Of course, the latter velocity is maintained only for a very short distance. The man who made this record jumped 120 feet.

Ice boats skim over the ice at velocities that have reached thirty-six yards a second, or more than a mile a minute.

The fastest that has been done on a bicycle is the record of sixty-six feet a second.

The horse can gallop six miles an hour for a considerable length of time. The swiftest dog in the world, the borzoi or Russian wolf-hound, has made record runs that show seventy-five feet in a second, while the gazelle has shown measured speed of more than eighty feet a second, which would give her a speed of 4800 feet in a minute, if she could keep it up for that distance.

The gazelle, however, swift as she is, is not as swift as the ostrich, for that homely but swift bird can run ninety-eight feet to the second when he really gets down to it. But then he helps himself along with his wings, which may not be of much use for flying, but are exceedingly helpful in running.

The whale struck by a harpoon and sounding in terror, has been known to dive at the rate of three hundred yards in a minute.

The Virginia rainpiper has made measured flights of 7500 yards a minute, and the European swallow has attained speeds of more than eight thousand yards.

A species of crow flies in great swarms from the German mainland over Heligoland every day, goes clear to the English coast and returns again every night. Close observation shows that these birds habitually fly eighty miles in three hours.

A species of falcon, known as the wandering falcon, flies from North Africa to Northern Germany in one unbroken flight, making the distance in eleven hours.

The slowest creatures are snails and certain small beetles. Some of them habitually move only a foot or two in an hour; but part of this slowness is due to the fact that they remain motionless at intervals. By measuring the distances covered by snails when they were kept going constantly it has been found that the maximum speed of a good healthy snail is 5½ feet an hour.

The ladybug is a perfect racehorse compared with this, for it climbs a blade of grass at a rate of almost two inches in a second, or nearly ten feet in a minute.

That speed, by the way, is exactly the average rate of speed which Nansen's Polar ship Fram drifted with the ice during her voyage of 2½ years locked in the floes. And when Nansen left the Fram and pushed ahead with dog sledge he didn't do so much better, for he rarely made more than nine miles a day.

None of the speeds made for any length of time compare with the speeds that are held for a second or a fraction of a second by some small creatures. Thus, a jumping mouse found in the African desert leaps through the air at the rate of eight hundred feet in a second. Of course, she clears only about ten feet in a jump, and cannot keep up these jumps for any great length of time. Still, the little creature is swift enough to make a fast greyhound work hard for a quarter of an hour or so, till the mouse is wearied enough for him to outrun her.

Still quicker than this desert mouse is the common flea, which jumps with an initial velocity of 899 feet in a second. If the flea could keep this speed up steadily, without stopping once, it would cover almost ten miles in a minute.

But even the flea's velocity is nothing when compared with the velocities in celestial space. Luminous clouds have made a measured speed of fifteen miles a minute, while earthquake shocks have been observed to move at rates reaching six hundred yards a second.—Scientific American.

The Little Old Story.

There was once a little old man and a little old woman, and they lived in a little old house on a little old farm. They had a little old cow and a little old horse and a little old dog and a little old cat.

One day the little old man dug him a load of potatoes and started off to the little old town to sell them. The little old woman took a little old basket and went out to the little old barn to milk the little old cow. But no sooner had she begun her milking than the little old cow picked up her little old feet and kicked the little old woman over. She was so badly hurt that she could not get up, so she lay on the ground calling to the little old dog, "Tipsy, Tipsy, O Tipsy!"

The little old dog came and walked around the little old woman and knew not what to do. By and by she began saying, "Go for your master, Tipsy! Go for your master, Tipsy!" The little old dog, who was sitting looking at her with his little old tongue hanging out of his little old mouth, trotted off down the road to town.

He found the little old man in a store, where he had just sold his potatoes and was putting his little old pocketbook in his little old pocket.

"Why, bless me, there's Tipsy!" the little old man cried when he saw the little old dog.

Tipsy took the little old man's coat-edge between his teeth and pulled at it. "Tipsy, Tipsy! Is there anything wrong at home?" the little old man asked him; and when the little old dog kept on pulling, the little old man ran out to the little old hitching rail, untied the little old horse, jumped in his little old wagon and whipped up the little old horse to as fast a trot as he could travel.

When he finally got to his little old house he saw no little old woman anywhere about, so he quickly drove back to the little old barn, and there she lay, still groaning on the ground.

The little old man picked up the little old woman in his arms and carried her into the little old house and laid her on the little old lounge. Then they sent for the little old doctor, and he came in his little old buggy, with his little old fat gray horse and gave the little old woman a little old pill, so that she was soon well again.

But they all knew that if it had not been for the little old dog the little old woman might never have got well, so they gave him the best there was in the house to eat; but they sold that little old cow to the little old dairyman, who lived in a little old house back of a little old hill. And every day the little old dog Tipsy would trot down to make a visit to his friend, the little old cow.—Grace MacGowan Cooke, in St. Nicholas.

The Cavities.

"Name the cavities," said a school teacher to a small boy, according to The Chicago Inter-Ocean. The boy was very round; his body was round, his eyes were round, and his legs were round, and one of them drew up as if by pulley as he screwed his head on his neck and twisted his round mouth to say: "T-t-the head cavity, the thorax cavity and the borax cavity. The head cavity's what we keep our brains in to think with, an' the thorax cavity's what we keep our lungs in to breathe with, and the borax cavity's what we keep the vowels in, consisting of a, e, i, o and u, and sometimes w and y."

Historical.

—The great Boston earthquake was felt on Nov. 18, 1755, a later episode in the great seismic agitation which had caused the Lisbon earthquake on the first day of the month. It began with a roaring noise, as of thunder, which lasted for a minute. Then came a long rolling swell so great that men in the open fields ran to seize something to hold on by lest they should be thrown down. After a few lesser shocks there came a violent shock of two minutes duration, a sharp horizontal tremor with sudden jerks and wrenches. In Boston this shock damaged or destroyed many buildings, in the country stone walls were thrown down, in the bay large numbers of fish were killed and floated to the surface.

—One day, while walking in the early spring with the Emperor Nicholas of Russia, Bismarck noticed a sentry on guard in the middle of a grass plot between Paul's Palace and the Neva. The emperor inquired the purpose of the man, but none could tell him; he sent for an officer, still without result. News of the inquiries spread into the servants' quarters, and then a very old man gave them the explanation. He had had it from his father, who, pointing to the sentry, had said: "There he is, still standing to guard the flower; on that spot the Empress Catharine once noticed a snowdrop in bloom unusually early and gave orders that it was not to be plucked." This command had been carried out by placing a sentry on the spot, and ever since, day and night, winter and summer, one had stood there on guard.

—The past was more prolific in the production of giants than the present, remarks the London Tatler. In 1830 one of these giants who was exhibited at Rouen was ten feet high, and the giant Galabra, brought from Arabia to Rome in the time of Claudius Cæsar, was the same height. Fannum, who lived in the time of Eugene II, was 11½ feet in height. The Chevalier Scrog in his journey to the peak Teneriffe found in one of the caverns of that mountain the head of a giant who had sixty teeth, and who was not less than fifteen feet high. The giant Paragus, slain by Orlando, the nephew of Charlemagne, according to reports, was twenty-eight feet high. In 1814, near St. Gernad, was found the tomb of the giant Isolent, who was thirty feet high. In 1590 near Rouen was found a skeleton whose head held a bushel of corn, and which was nineteen feet in height. In 1623, near the castle in Dauphine, a tomb was found thirty feet long, sixteen feet wide and eight feet high, on which were cut in gray stone the words, "Kentoiochus Rex." The skeleton was found entire and measured 25½ feet, ten feet across the shoulders, and five feet from breastbone to the back. But France is not the only country where giant skeletons have been unearthed. Near Palermo, Sicily, in 1516, was found the skeleton of a giant thirty feet high, and in 1550, another forty-four feet high. Near Magrino, on the same island in 1516, was found the skeleton of a giant of thirty feet, whose head was the size of a hogshead and each tooth weighed five ounces.

Notes and Queries.

ORIGIN OF THE NAME STAR ROUTE.—"D": Inquiry at the postoffice department has unearthed the information that a "star route" is a post route on which the mails are carried under a contract awarded to the lowest bidder tendering sufficient guarantees of performing his duties faithfully. No other reference is made to the manner in which the mails should be carried under this contract than that they shall be carried with "certainty, celerity and security." Prior to 1845 it was the practice of the department to have regard, in some cases to the mode of transportation, preference being given to bidders who proposed stage or coach service. The act of Congress of March 3, 1845, however, abolished this and provided that it shall be the duty of the Postmaster General to provide for the carrying of the mails by these routes with "certainty, celerity and security." Bids for such service were thereafter classified as "certainty, celerity and security" bids, from the distinguishing words of the statute, and the clerks of the contract division, presumably to avoid writing out the words on the books of the office, soon began to designate them on the route registers by three asterisks, or stars. They thus became known as "star bids," or "star routes," as they are known today.

WHERE TIME CHANGES.—"J. M.": Standard time has been adopted by Japan, by European residents in China, and by the telegraphs and railways of that country. Tokio is about fourteen hours ahead of New York. For instance, a naval battle opening in Japanese waters Monday forenoon would be going on while it was still Sunday afternoon in New York. Operations in Manchuria would come under Asian coast time, which is thirteen hours faster than New York. The Orientals on the other bend of the world are always half a day ahead of us chronologically. The line where "time changes," where a ship loses a day going west and gains one going east, is drawn irregularly down the Pacific coast east of New Zealand, where the time is nineteen and a half hours faster than San Francisco's.

WHY THE SKY IS BLUE.—"L. V. T.": The sky has long been a puzzle to physicists. There are two mysteries to explain about it—its reflection of light and its color. The old view was that the blue of the sky was due simply to atmospheric oxygen. Oxygen has a faint blue tint, and the idea was that several miles of the gas, even when diluted as it is in the air, would have a bright blue color. But this did not account for the immense illumination of the sky, and of recent years Tyndall's "dust theory," or some modification of it, has been generally accepted. This regards the blue color as an optical effect, like the color of very thin smoke, due to excessively fine particles floating in the air, which would also account for the large proportion of reflected light from the sky. Recent calculations by Professor Spring of Liege, Belgium, however, indicate that the dust in the air is not sufficient in amount nor finely enough divided to support this explanation, and he rejects it for this and other reasons. He has gone back to the old oxygen theory, and accounts for the general illumination of the sky on the hypothesis, first advanced by Hagenbach, that intermingled layers of different density in the atmosphere give it the power of reflecting light.

ORIGIN OF VEGETABLES.—"K. R.": America gave to the world the potato, tomato, pineapple, Indian corn and the chocolate tree. There seems to be some doubt about the sweet potato. Though it appears to have originated in tropical America, it is credited by some to the East Indies. A large number of our common fruits and vegetables were brought from Asia, and some of them have been known from time immemorial says the New York Tribune. Many people suppose the pumpkin to have originated in America, because the Indians cultivated it freely among their maize. It is now believed to be of Asiatic origin, and perhaps was brought over to America by the aborigines. It has been cultivated in England since 1670. The onion has been in use since the days of ancient Egypt, and is said to be more widely grown than almost any other plant. Its native country is unknown. Turnips were cultivated by the Greeks and Romans. Spinach was introduced into Europe by the Arabs. Beans have been known from prehistoric times. Some varieties are of American origin. Peas were known to the Greeks and Romans. Garlic is a native of Central Asia, and perhaps of the Mediterranean region. It was well-known to the ancients, and is still a favorite among the people of southern Europe and most Oriental countries. Parsley is a native of the Mediterranean regions. In the Nemean games the victors' crowns were of parsley. Carrots are a native of Europe and northern Asia and have been known from the earliest times. The cucumber is a native of Southern Asia, but has been cultivated from the earliest times in all civilized countries. The radish has been known and highly prized for its crisp, fleshy root from the days of ancient Egypt. Lemons are found wild in the mountainous regions of India, especially in the north. As a cultivated fruit tree the lemon was early known and disseminated by Arabs, but appears not to have been established in Europe till a comparatively late period. It was introduced, perhaps, by the Crusaders. The local origin of the peach has commonly been ascribed to Persia, but the investigations of De Candolle points to China as its birthplace. The quince was known to the ancients, and it has been argued that the golden apples of the Hesperides were quinces. Pears belong to Europe and Asia. Muskmelons are not known in the wild state. Their origin was referred by De Candol'e to the region of the Southern Caspian. They have been cultivated from time immemorial in the hot countries of the East. The apricot was formerly believed to be a native of Armenia, but it is now supposed to be a Chinese fruit. The cranberry is said to be a native of every continent in the north temperate zone. The orange is said to have come originally from India or China. The cherry was introduced into England by the Romans. The strawberry was not cultivated by the ancients. Its culture in Europe began somewhere in the fifteenth or sixteenth century.

The Horse.

Choosing a Work Horse.

Look for weight and quality. The market, when it talks about a draft horse means a horse that when he is in good condition weighs 1600 pounds or more, and the more weight, when quality goes with it, the higher price he will bring. The horse of the draft type that weighs less than 1600 pounds drops into such classes as chunks, and down to 1200 or 1300 pounds they are called chunks. If pretty, trim and active, nervy and nicely finished, with style, he will come into the class of expresser, fire department horse, etc., for which there is more and more demand, but they must be choice and full of nerve. Then there is the busser, which they use on busses in foreign countries, and to some extent in this country. There is a demand growing up for these smaller horses of the draft type.

I learned a little adage when I was a boy that has saved me some money in dealing with horses, and that is this: "No feet, no horse." When I judge a horse, when I buy a horse, when I look at a sire to use for breeding purposes, I really look down at his feet first, then I look up at his top lines, and then at the fat on his body.

You may buy a horse that is not quite perfect in body and his top lines, and with plenty of care and corn and clover hay and some molasses if necessary (if you are going to let the other fellow have him pretty soon), you can fill up the weak places in his body, but I have never found any way of filling up the places in his heels or his hoofs. So, starting at his feet, I want a high, strong heel; a heel that will not spring as that horse moves along on the road, I want a full, plump, well-rounded foot, not too narrow at the heel and not too wide, with a good tough shell upon it, and that shell thick and well fastened to the body of the hoof. I want a properly sloping pastern, that is, a pastern that slopes possibly at an angle of forty-five degrees, or if you drop a plumb line down the centre of the leg, so that your plummet will fall a little behind the heel. When your horse travels upon the road and strikes upon the hard surface, either at a walk or trot, the jarring on a straight pastern goes from joint to joint, from tendon to tendon clear up the leg, but if there is a springiness in that pastern between the first two joints, that jar goes no further than the first joints. Again, when we are speaking about the pastern on the hind leg, if it is a straight pastern, and you put that horse to a hard pull, the tendons naturally harden up and shorten up with the hard work, and pretty soon you will have a horse that knuckles over, and he cannot pull as much as if he had some slope to that pastern.

A clean, fat leg, showing the tendons standing out, and, if he is the class of horse that carries hair on the legs, then be sure that the hair covering upon the leg is soft, silky and wavy, not the short, kinky kind, such as a negro grows on his head. The silky, wavy hair indicates a good quality of flinty bone underneath and a short, kinky hair indicates a coarse porous quality of bone underneath that covering. I do not mean to say that the negro's brain is necessarily that way under his hair, but the horse's leg is that way, because I have cut them myself. I have seen them cut, and I have seen invariably that very coarse and rough hair on the leg shows a coarse, porous bone, and clean, silky hair on the leg shows a flinty form of bone.—George McKerrow, Madison, Wis.

Breeders' Notes.

No sensible farmer can expect to raise a profitable crop by planting good seed in impoverished or unfertile soil. Neither is it possible to make horse breeding profitable by mating inferior mares with the best of stallions.

It should be the aim of every farmer who raises horses to breed up. Every generation of horses should prove superior to the preceding one. It will be if proper care is used in the selection of brood mares and stallions.

Twenty-five dollars extra spent in educating and grooming a horse to properly fit him for market will often add from $50 to $100 and sometimes much more than that to his selling value.

Trainers, in New England, who give their horses a slow, careful preparation in the spring and early summer generally bring home the most money at the close of the season.

With the large number of well-bred stallions that are standing in New England at moderate service fees there is no excuse for any man to breed to a scrub stallion.

Many breeders throughout New England are planning to raise early foals next season. This will be to the advantage of such as intend to start the youngsters in colt stakes.

The scarcity of good horses has caused an improved demand for the cheaper grades of serviceable animals and prices on such are now higher than for years.

Liberal feeding and good care are just as essential to a high degree of success as the selection of good brood mares and first-class stallions.—Horse Breeder.

Notes from Washington, D. C.

THE SEEDLESS-APPLE FAKE.

The fraud in connection with the exploitation of the so-called coreless and seedless apple has been so thoroughly proven, not only by the various agricultural journals but to the satisfaction of the Government officials, that it would seem as though some official cognizance should be taken of the matter, and, if possible, a fraud order issued by the Postoffice Department barring the use of the mails to the concern engaged in separating people from their money in exchange for something practically worthless.

The apple experts of the Department of Agriculture state that they have seen no regulation advertisements of this apple in any of the papers; on the other hand thousands of columns have appeared during the last year, ranging all the way from the short associated press notices, which were sent out to some seven hundred of the largest daily papers to special syndicated articles, illustrated and painted in words more enticing than the pictures of the apples. Even some of the staid, semi-scientific papers and the magazines have aided in free advertising, while the New York Journal devoted an entire page with colored illustrations rivaling theatre posters to this and other seedless freaks.

Photographs taken by the photographer of the Agricultural Department's Division of Pomology from the samples of the coreless and seedless apple submitted to the Government show large and woody cores, while the further claim of the promoters that by reason of the non-blossoming attribute of this apple the codlin moth does not affect the variety was disproved by one of these apples containing a well-developed worm.

The Assistant Pomologist, W. A. Taylor, states that this apple has no standing whatever among apple men and horticulturists, but that the uninformed public is apparently being successfully taken in. The officers of the company are in every case, with the exception of the president, men unassociated with fruit culture, and the manager is a Western cattle man.

Mr. Taylor says that the statements in the literature furnished by the company are very skillfully worded; the statements made in the American public press, by which the people are being influenced, are extravagant and misleading if not in a large measure entirely untrue.

THE BUILDINGS OF HILLSIDE FARM.

A prominent Maine stock farm on the shores of Moosehead Lake. The purebred Guernsey bull shown in the picture has been trained for driving and special farm work.

MILCH GOATS FOR BABY GROWING AND FOR CHEESE.

The recently gotten out reports of the Department of Agriculture on milch goats have brought in a flood of letters of inquiry and have attracted much attention to this industry, a bran new one in this country but one of great importance in Europe. Mr. George F. Thompson of the Bureau of Animal Industry states that there are only about thirty pure bred milch goats in the United States, and that of the two million or so American goats reported by the census, probably not over five thousand are of any value as milk producers. Goat milk, owing to its ease of digestion and freedom from tuberculus bacteria is of great value in child rearing and in the treatment of weak stomachs generally: it is also used largely in producing the high priced cheeses of Italy and Switzerland, which sell in this country for from fifty cents a pound upward.

The Department of Agriculture is expecting to import a small flock of pure bred milch goats, which in Europe yield a gallon or more of milk a day, for the purpose of crossing them on the few thousand common milch goats in this country which Mr. Thompson says may be found to yield from a pint to a quart of milk a day. It is believed by the Department that a very important industry has been thus far overlooked in the production of milch goats. The Angora goat is useless as a milk producer. Goats multiply more rapidly than sheep, the offspring ranging from two to four. Instances are cited by Mr. Thompson where the lives of sickly babies, cases which have been given up by physicians, have been saved by the use of goat's milk.

HARDY LEGUMES FOR THE NORTH.

Realizing that the continual cropping of northern lands to wheat and other crops is gradually impoverishing the soil, Secretary Wilson has sent two of his explorers abroad to secure a hardy legume for rotation and soil renovation which will take the place of clover in the Middle States. A hardy legume has already been introduced into the Northwest, and this is proving a good permanent forage crop, but something is wanted which can be plowed under every other year and keep up and increase soil fertility. So he has sent one expert into Norway and Finland with instructions to bring him all the plants, grains, grasses and particularly hardy legumes which he can find. Possibly, said the secretary, he may find a clover that does not winter kill.

Another agricultural explorer is to privateer along the Yangste Kiang and go up into its headwaters among the hills and mountains of China—on the Roof of the World, the original home of the peach. "He will bring home the different types of that peach," said the secretary, "and all the legumes, grains and grasses. In this way, we may by importation be able to hasten the work of science, that is, while we could gradually acclimate the crops we have to the rigorous conditions of the northwest, it would take years, but the Department's explorers are going into these countries, where people have been growing crops for hundreds and thousands of years, and may find something already made to order."

The Franklin Institute of Philadelphia has recommended that the John Scott medal and premium, awarded in recognition of the value of invention, be given to the originator of the Taylor process for butter-making. In this process, shallow pans are provided, the bottoms of which are covered with absorbent pads, composed of heavy white blotting paper supported on Turkish toweling or some similar material. The sweet cream is poured into these pans and the absorbant material collects all of the constituents of the liquid except the fat which remains on the surface; after allowing the coating to stand a couple of hours it may be rolled off. Since the pads are to be used over and over again, six months being their estimated length of utility, the process is said to be very advantageous on account of its cheapness. No churning is required, and with the cream used in its fresh state instead of allowing it to stand a couple of days to ripen before churning, the finished product has added flavor and keeping qualities.

GUY E. MITCHELL.

A Tree Crank.

It was Arbor day. Farmer John and Farmer Henry, brothers, had bought farms in neighboring States. They did not meet for years. Farmer John grew poorer and poorer and Farmer Henry richer and richer, yet both were brought up on the same farm.

One spring at planting time, Farmer Henry, having some business in the State where his brother lived, improved the opportunity to go through Barebush, where his brother lived, and stopped to look him up. He found him with his men working at a stump-puller, in front of his house.

"Goodday, Brother John, how does the world use you?"

"So-so, Brother Henry. You look as if the world used you pretty well. I thought you would go to ruin straight as a horse to water, but I hear you are getting rich. Given up all your cranky notions I suppose, and got down to hard work?"

"I have not given up any of the ideas you called cranky notions," answered Farmer Henry, "on the contrary, it is the carrying out of these same notions that has brought me prosperity."

"I saw by the papers there was a lot of damage done in this town in the big storm we had."

"Yes, the wind made a pretty clean sweep. Not much encouragement to try to get ahead in this world, when it isn't one thing it is another. How was it up in Elmville?"

"Little damage."

"Yes, your natural advantages are better than ours."

"Well, Brother John, as far as situation goes, you have the advantage of us, not being so exposed, but we have preserved the forests around us, and they break the force of these gales, and by the time they get to the town, their backs are weak. I noticed as I came through great tracts of timber cut down here."

"That is what we buy it up for; to sell," said Farmer John. "I own a sizable bit of timber and I made a respectable spec out of it, too."

"How much did you lose out of it when the storm struck you?" asked Farmer Henry.

His brother did not reply directly, evidently searching his brain for some satisfactory answer. At length he said: "I could better afford to lose a little than to leave the timber standing."

"How are the crops coming on?" inquired Farmer Henry next.

"Poorly, usual luck! Got chilled that cold spell we had."

"Yes, I see; nothing to protect the land on the north side of the town or the north side of your farm. We are always having cold storms and cold spells and late frosts."

Farmer John looked nettled, for the subject of trees was one on which he and Farmer Henry had always disagreed. "Perhaps you made enough last year to afford to lose a little this season," continued Farmer Henry.

Farmer John gave a grunt: "I might have, if it had not been for the pesky vermin. Bugs and worms are particularly fond of this part of the country. How was it over your way; just the same I suppose? Folks said the plague was universal."

"No, we had little trouble, and would not have had that much if it had not been for our neighbors. We leave the hedgerow standing for the birds to build in, and we protect them. They keep down the pests, and might rid us of them if they did not swarm over from the neighboring towns where they prefer worms and bugs to shrubs and birds."

"Pooh!" commented John. If there was anything he detested it was birds and bushes. "You never can make me believe that." The very words he used to say when they quarreled on their father's farm. "I can't afford to lose grain and fruit to fatten birds."

"Which eats the most, vermin or birds?" asked Henry.

"It's something besides birds that is needed," rejoined John, overlooking the fact that bird raising had insured good crops on Henry's farm. "And as for bushes, I can't abide such clutter. A thrifty farmer has clean walls and fences, and I cut down and turn over all my hedgerows."

John climbed into Henry's wagon and showed him around the farm. Everything looked bear, and even bleak in the midst of the spring greenness. The hedgerows were full of blackened stumps, with here and there heaps of dirt and brush not yet disposed of, and piles of stones, and occasionally dumping spots that smelled as disagreeable as they looked. But John appeared proud of all this, which to his mind was a "cleared-up," thrifty condition. "We are progressive here," he said, "we are going to have sidewalks along these roads some day. We have cut down the bushes and begun filling in."

"How many years will it be before all these unsightly and unwholesome spots are leveled and covered?" asked Henry.

John stared. "Of course we can do but a little at a time," he said, "and as for the dumps, why all this stuff has to go somewhere. We can't have it around our dooryards."

"You might as well," said Henry, "for you breathe the air that comes from it, and so does every one else in the town. Why don't you dig holes and bury up what you can't burn?"

"Time is money," observed John.

"You may save not only time and money but precious health, and even lives, by attending to this matter," suggested Henry.

"Yes, yes, you are as cranky as ever!" exclaimed John.

"Given up keeping chickens?" asked Henry.

"Yes; so much wet weather last year; ground got sour and the fowl sickened. Sold them all off."

"I did not have any trouble," declared Henry. "The roots of the trees on the place made such good drainage. Trees absorb a good deal of moisture, too. A neighbor of mine whose land was not sweet, and who had sickness in his family about all the time, set out a half dozen trees about his place two years ago, and you would be surprised to see the improvement in the land and the family."

This was too much for John. "Of all your cranky ideas that is the most idiotic," he exclaimed. "I have dug up about all the trees on my place, and I am finishing the job this season. I am not half so much troubled about the dampness, as I am about the droughts. Why, last year, the grass on the lawn scotched clear into the roots, and the kitchen garden just shrivelled up. I thought it did not pay to breed trees when moisture was scarce, and this spring I am digging up those nuisances of shade trees."

"I am setting out more trees," replied Henry, "trees cool the air and protect the ground, and not only your garden but your cattle and lawn will thrive better for the trees, not to mention the comfort of it to the family in the house and out."

"You may talk to me till doomsday," declared John, "about trees; you can't convince me they are good for anything but to burn or build with. "Whew, how hot it is! This is like a July sun."

Henry looked up and down the barren road destitute of tree or bush, and wiped his forehead, as he remarked: "Our town has the name of being one of the most healthful and beautiful towns in the country. The only difference in our town and many others is that we have a good many trees; groves beside our houses, shade trees next the street, and whenever a wood lot is cut down a double row of trees is left next the road, so the shady avenues do not end as soon as one gets outside the town proper, and where there are not yet houses there are the shade trees continued, so we have long avenues, and nowhere have blistering stretches of sand, blinding and scorching."

"Unhealthful, unhealthful, so many trees are unhealthy," exclaimed John.

"Oh, we don't have them so thick but that an abundance of sunshine gets in," said Henry. "Plenty of sunshine and plenty of shade is what we need."

"Unhealthful, unhealthful and wasteful, wasteful!" repeated Farmer John.

MABEL GIFFORD.

Norfolk County, Mass.

Forcing the Milk Farmers.

That the milk contractors of Boston are using the Board of Health as a catspaw is now quite generally understood. The dealers are naturally very willing to get milk of better grade and more carefully handled, provided they pay only the same old price. By prodding the city Board of Health to stiffen the regulations and to enforce them, they hope to secure their ends at no extra cost and without the trouble of fighting their battles direct.

The board of health takes the responsibility, the milk farmers are forced to incur added labor and expense without pay, while the contractors, the instigators of the whole movement, merely stand aside and receive the benefit in the shape of better and more valuable milk that sells more readily, increasing the demand and adding to the contractors' profit. Without much doubt the farmers would sometime be able to force extra pay for the extra care, cost of ice, etc., urging their claims at some favorable opportunity. But just now the prospect is for a vexatious lot of trouble and nothing to pay for it.

Right here the contractor's shrewd little scheme is liable to run up hard against a stump. So many of the farmers may rebel and quit in disgust the milk shipping business, that the resulting shortage will become serious.

Some of the old time shippers already talk of stopping shipments, if shippers are to be compelled to use ice on the farm. They see little profit in the business at best, and have kept on mainly because it seemed easier to stay in the ruts than to get out. But with the prospect of a lot of new rules to follow, and perhaps more or less milk condemned and sent back, no question but that some of them will quit the business. Whether a shortage will occur depends on the possible good sense of the health officials and their backers, the milk contractors. Reasonable rules very gradually carried into effect so as to give producers time to adjust themselves to new requirements, might be carried through without much trouble, and sooner or later the producers would get better prices for the better milk. But if the "reformers" in their zeal, inspired by the dealers and being themselves out of touch with the farmers, should try abruptly to force too much upon the producers, there is likely to be trouble for all concerned. Nothing delights the contractors like a big surplus of milk with the pretext it brings for paying the producers a cut price. On the other hand, they dread a shortage, because it not only increases the average price of milk, but it also affords conditions favoring any demands of the producers for better terms.

Hence, for their own interests, the dealers will find it best to go rather slowly in the direction of enforcing new rules that will check production and reduce shipments. Judging from remarks lately made by leading contractors, some of them are beginning to take this cautious view of the situation.

Grain in Good Condition.

The monthly report of the Agricultural Department, promulgated Wednesday evening, showed that 1,433,000 acres of the winter-wheat area planted last fall have been abandoned. This compares with an abandonment of 4,982,000 acres on the same crop during the same period and 964,000 acres of the 1903 crop. The area remaining is 29,722,000 acres, which compares with 26,965,855 acres—the final harvest of 1904.

The Department reports the condition of winter wheat on May 1 at 92.5, which is an improvement of .9 from the April 1 condition, and compares with 76.5 a year ago. Basing his figures on an average value of a condition of one hundred for the past five years the statistician of the New York Produce Exchange, Mr. Henry Helmser, figures the promise of the winter wheat crop at 469,736,000 bushels. This, as a result of the abandoned acreage, is a reduction of from 479,787,000 bushels, which was the April estimate, but is about 147,000,000 bushels more than the winter wheat actually harvested in 1904.

The average condition of winter rye is given at 93.5, against 92.1 one month ago, 91.2 one year ago, 93.5 two years ago and 93.5 the May average for ten years.

Within a period of twenty-four hours I received letters leading to orders for Rhode Island Red breeding stock and eggs to the value of $46, all referring to to my advertisement in your paper.—F. P. Fiske, Holliston, Mass.

It is feared that the frost and ice of April 16, seriously injured the apple, cherry, plum and peach crop of Valley and Middle Virginia, which was in heavy bloom at that time.